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WHOLE EARTH Review

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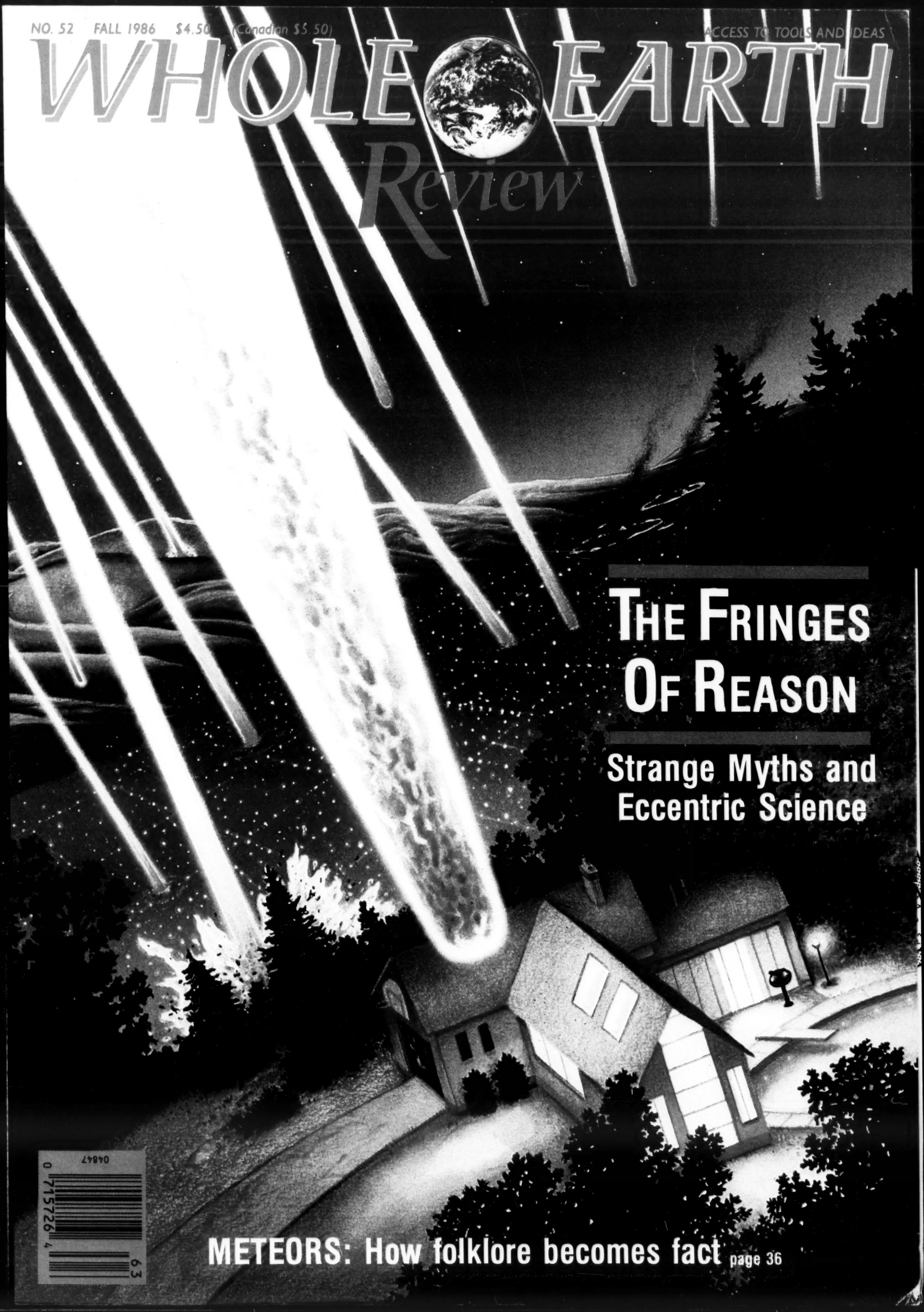

THE FRINGES OF REASON

Strange Myths and Eccentric Science

METEORS: How folklore becomes fact page 36

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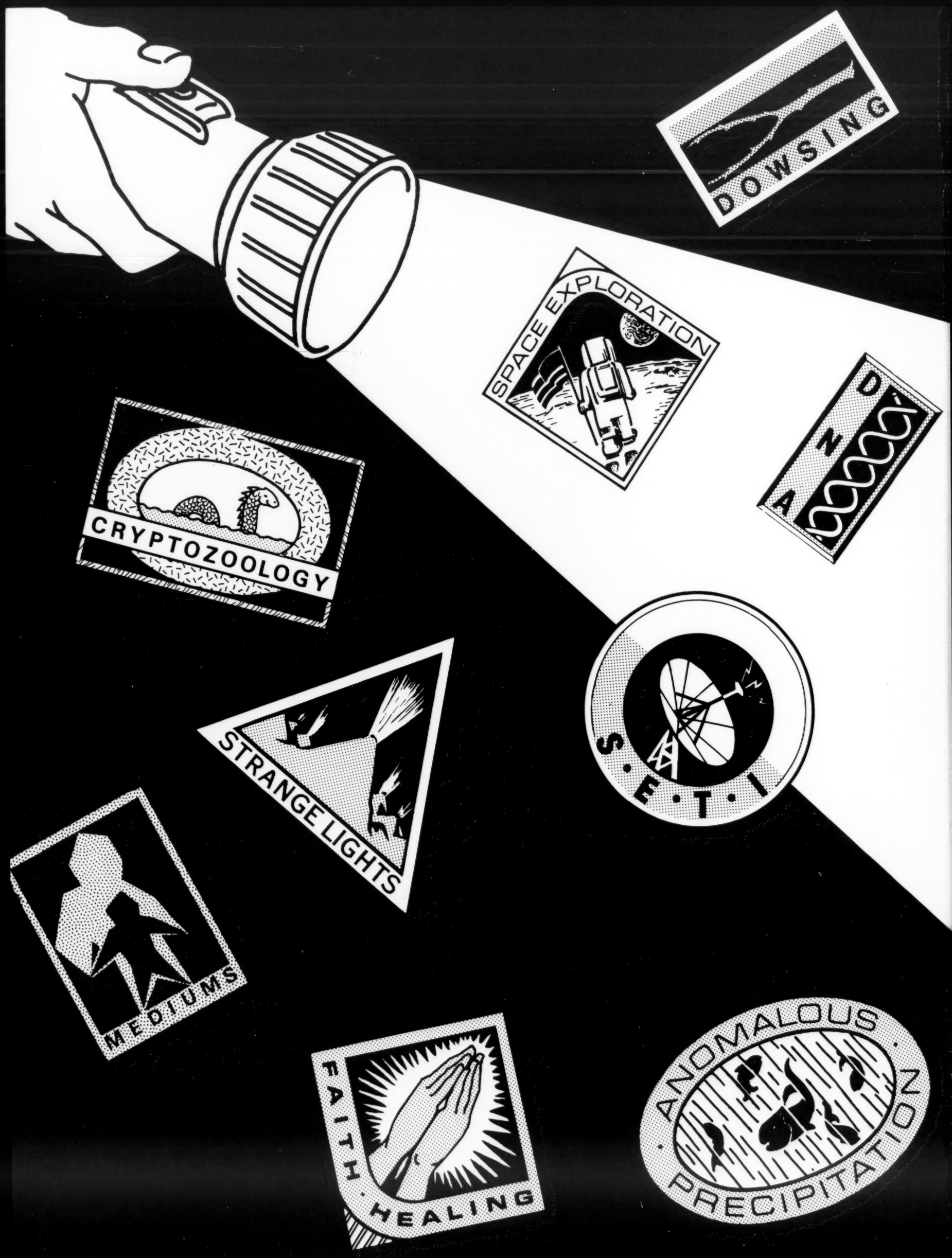
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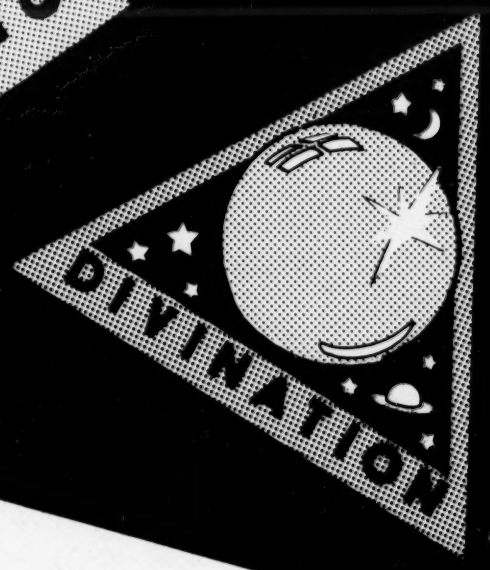
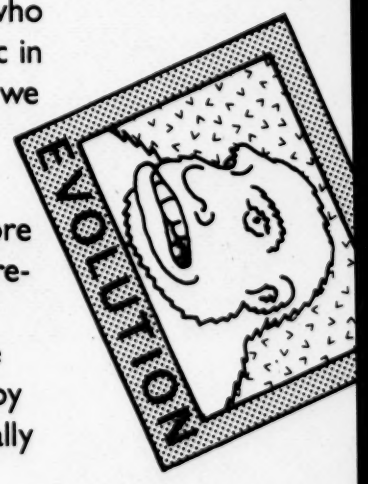


THE FRINGES OF REASON

Strange Mythologies Beyond the Edge of Science

In the past 200 years, scientific knowledge has succeeded in contradicting many of the mythic teachings of traditional religion, but it has failed to take on religion's role of providing meaning and hope in what for many is a dreary and mundane world. The new mythologies have emerged to fill this visionary void. Despite homogeneous mass media and social standardization on a vast scale, myriad strange beliefs spawn, fission, and multiply. Unusual religions. Space-age folklore. Pseudoscientific theories beyond counting.

If modern myths are cultural expressions, then their creators and adherents are social experimenters — however misguided, erratic, or uneducated — who are attempting to bridge that chasm between the visionary and the scientific in order to build a new unifying myth. At worst, they show us dead ends that we need not traverse again. At best, they provide us with clues, puzzle pieces for our Future Collective Myth, if such a thing is to be.



If we can entertain possibilities while withholding belief, we can safely explore this world of modern mythology for sheer pleasure. The myths can be appreciated as art if not as actual reflections of reality, manifestations of human creativity in spectacular diversity. The appreciator of the carnival of strange beliefs can dip below the surface of superficial cultural homogeneity to enjoy the wonders and the curiosities, the freaks and the aberrations, and especially the occasional dark-lustred pearl netted from the depths.

As Stewart Brand observed at a recent public celebration *(see page 127)*, "You've got to explore the edges to see where the middle is going." This special issue of *Whole Earth Review* explores the edges. —Ted Schultz

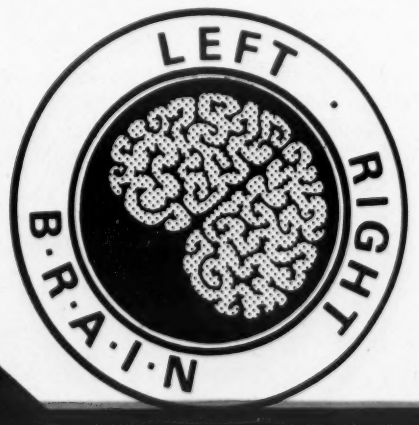


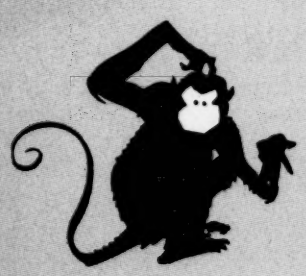
Illustration: Rebecca Wilson

WHOLE EARTH Review

Number 52 **FEATURES** *Fall 1986*

1 SPECIAL ISSUE: The Fringes of Reason
Introduction by Ted Schultz

4 Reality Shopping:
A Consumer's Guide to New Age Hokum
by Alan M. MacRobert



18 *Introduction to* **The Hundredth Monkey** *by Ted Schultz*

19 The Hundredth Monkey Debunked *by Ron Amundson*

24 Lyall Watson Responds

26 The Misunderstood Monkey
by Michael Huffman

30 Of Myths and Monkeys
by Maureen O'Hara

36 The Blind Eye of Science
by Ron Westrum

43 An Encyclopedia of Anomalies:
The Sourcebook Project
by William R. Corliss

52 Spontaneous Human Combustion
by Kevin Kelly

54 The Man Who Invented Flying Saucers
by John A. Keel

62 In Advance of the Landing:
Folk Concepts of Outer Space
by Douglas Curran

71 Am I Psychic Yet?
by Paul Krassner

75 Your Pathway to Cosmic Truth — By Mail!
by Rev. Ivan Stang, Philosophur Ekstaticus, Church of the SubGenius

86 Backstage with "Bob"
Is the Church of the SubGenius the ultimate cult?
by Jay Kinney

90 Same Channel, Next Week
Spirituality sweeps the suburbs
by Stanley Young

100 Bioregional Outlaw Radio
by Lori Woolpert

106 Visions of Home Preserving America's Folk Art Environments
by Jocelyn Gibbs

127 You Can't Count the Apples in a Seed
Ten Years of *CoEvolution Quarterly*
A conversation with Stewart Brand, Paul Hawken, Ken Kesey, and Gary Snyder

132 Good Movies *by Sheila Benson*

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DEPARTMENTS/REVIEWS

SPECIAL SECTION

15 Scrutinizing the Paranormal: Access to Skeptical Books and Magazines *by Ted Schultz*

35 Anomalistic Psychology

42 Ball Lightning and Bead Lightning □ Zetetic Scholar

50 The Journal of Meteorology □ A Geo-Bibliography of Anomalies

51 Fortean Times □ The Complete Books of Charles Fort □ INFO Journal □ Pursuit

69 UFO's: A Scientific Debate □ The UFO Controversy in America □ UFO Newsclipping Service

70 Eccentric Lives and Peculiar Notions □ Fate Magazine

74 The Realist

89 The Book of the SubGenius □ The Stark Fist of Removal

COMMUNICATIONS

93 Do Tabloids Turn Housewives Into Zombies? *by Michael H. Randall*

96 The New Comics *by Jay Kinney*

98 Cerebus the Aardvark □ Manga! Manga!

99 Turbo Lightning □ The IBM XT Clone Buyer's Guide □ CD Rom: The New Papyrus

102 The A*C*E

103 The Passion of Ayn Rand □ The Golden Road

104 Fiskadoro □ Riddley Walker □ Arrows of Desire

105 Incredibly Strange Films □ Talking Pictures

COMMUNITY

113 In Celebration of Ourselves □ Sustainable Communities

WHOLE SYSTEMS

114 Tropical Rainforests □ Biophilia

POLITICS

115 With the Contras □ The Viet Vet Survival Guide

116 Working Assets □ The Animals' Agenda

HEALTH

117 Poison Oak & Poison Ivy □ Inexpensive Geiger Counter

118 M.O.M. Magazine □ NOCIRC □ Sexual Well-Being

119 Alida: An Erotic Novel □ Ladies' Own Erotica □ Pleasures □ Tits and Clits □ On Our Backs

120 Self-Hypnosis Cassette Tapes *by Rebecca Wilson*

LEARNING

121 The Shape of Space □ Gnosis

122 Fireworks: Beyond the Spectator Sport *by Peter J. Sabatini, Jr.*

LAND USE

125 Edible Landscaping □ Wonder Crops

126 Indoor Marijuana Horticulture □ Peaceful Valley Farm Supply □ Gardening by Mail

BACKSCATTER

133 Echoes from readers back to *WER*

GATE FIVE ROAD

136 Masthead □ "Or Whole Earth Access" □ Back Issues/Further Issues

137 Financial Report □ Truth in Labeling: the financial report deciphered □ Recent *WER* mailing list renters □ Subscription problems/address changes

138 Gossip

139 Thank You! □ Adopt-A-Library

140 How to submit things to *WER*

141 Unclassifieds

145 Explain This! *by Norman Dog*

COVER: Meteors and other anomalies that have been overlooked by "The Blind Eye of Science" are discussed in Ron Westrum's article on page 36. Paul Mavrides painted our spectacular "neo-pulp magazine-style" cover. Paul also co-built the flying saucer model that appeared on the cover of issue #47. He's responsible for some of the finest work in underground comix, notably *Anarchy* and *Dinoboy*, which he co-creates with Harry S. Robins, also represented in this issue.

—Ted Schultz

Reality Shopping

A Consumer's Guide to New Age Hokum

by Alan M. MacRobert

Illustrated by Tim Barrett

RECENTLY ON DISPLAY in bookstores throughout America was a flashy paperback entitled *Somebody Else Is On the Moon*. The cover depicts an astronaut coming upon huge tracks in the lunar soil and pipes sticking out of a crater. "For 200 years astronomers have suspected — now we know!" proclaims the blurb. "Incredible proof of an alien race on the moon! The evidence: Immense mechanical rigs, some over a mile long. Lights, flares, vehicle tracks, towers, pipes, conduits."

To the connoisseur of crank literature, this book is a delight. It is the rambling narrative of how author George H. Leonard, a retired public health official, has identified amazing things in photographs of the moon that he gets by mail order from NASA. (NASA, of course, is part of a governmental conspiracy to cover up Leonard's findings. The only reason the Apollo astronauts visited the moon was to study its inhabitants, and everything else is a government hoax that "dwarfs Watergate.") The chapters of Leonard's book bear such titles as "A Motor As Big As the Bronx" and "Service Station in a Crater?" Thirty-five pages of moon photos illustrate with circles and arrows the marvels discussed in the text. But the circles and arrows point to nothing unusual at all. The photos are just ordinary moonscapes of hills, plains, and craters.

The most interesting thing about *Somebody Else Is On the Moon,* however, is not its contents. It's the publisher's marketing strategy. The book was placed in bookstores among the offerings for "New Age" readers, including those like myself who like to think that we are in the vanguard, exploring important new ideas and philosophies. There, in fact, is where all sorts of crank literature has migrated. That's where it sells.

In times past, purveyors of fringe and paranormal ideas bitterly charged that they were being censored out of print by conspiracies of publishers and orthodox scientists. No more; all holds are off. Firewalking, sunken continents, astrology, psychokinetic spoon-bending, psychic readings, channelling, aura reading, remote viewing, psychic archaeology, scores of dubious holistic health systems, and a thousand other paranormal ideas have been getting a hearing like never before. And my generation, the supposedly "skeptical" generation, is eating it up.

The very abundance of such claims has made the "Search," as I like to call it, more difficult than ever. This Search is a tradition in my family. My grandfather was a devout Spiritualist. He held seances with the great mediums of the day — Arthur Ford, Eileen Garrett — and he took my mother and father to all the main Spiritualist camps. My parents were somewhat more skeptical. My father joined the American Society for Psychical Research and became one of its directors, investigating haunted houses, poltergeists, clairvoyants, and telepaths long before such investigators were guaranteed a spot on the *Merv Griffin Show*. Up in the attic we still have a set of fake spirit photographs a medium tried to pass off on him; spirit

---

If there were a Consumers' Union for the paranormal marketplace, Alan MacRobert could be its Ralph Nader. As the heir to three generations of Spiritualism and psychic investigation, he's learned to harmonize the dual traits of fascination with the unknown and healthy, uncompromising skepticism. His article is a guided, grounded tour through the carnival of paranormal claims. Alan is an editor at Sky and Telescope *magazine, and a former editor at* Vermont Vanguard Press, *where a substantially different version of this article originally appeared.*

—Ted Schultz

Physicist John Taylor published this photo in his 1975 book Superminds as proof of psychokinesis. This seven-year-old boy was one of several children who fooled Taylor into believing that they could bend silverware with paranormal powers.

photography was the popular equivalent in those days of psychics' key-bending stunts now.

Some of my earliest reading materials were the "psychic books" that filled my family's bookcases. In one of them, I ran across an engraving of my great-grandfather, Emerson J. MacRobert, a Spiritualist in London, Ontario. At a time when such activities were scandalous and possibly illegal, he had held seances in a top-floor room of an old house with velvet tacked over the windows. Word got out and he was nearly forced from his post on the London School Board by righteous churchgoers. In my childhood reading, I also ran across an old reference to something called a "Treborcam Ethereal Healing Machine." The name is my own spelled backwards.

Descended from two generations of Spiritualists, my father was always noncommittal. He had run across plenty of frauds and exaggerations, but, even at its best, the Society for Psychical Research seemed only able to draw blanks. Under close scrutiny, psychics failed because they were "having a bad day" or because their powers were impeded by the presence of skeptics. Modern parapsychologists excuse the "nonrepeatability" of their experiments with much the same rationale.

This lifetime exposure to the paranormal has left me somewhat disillusioned and impatient with the intellectual credulity of my generation — no improvement on that of my grandfather's. Still, I'm ready for the day when UFO creatures land on the White House lawn and are interviewed by Dan Rather, or when one single psychic somewhere can predict the future or reliably levitate paper clips so that anyone can see it's so. In the meantime, here, culled from all the time I've spent in the Search, are some guidelines by which to evaluate the flood of paranormal claims. These guidelines, carefully applied, should help eliminate the claims that are worthless — at least 98 percent of them — and will provide grounds for evaluating anything that's left.

Looking the Other Way

Almost everyone with a paranormal theory to tout, I have discovered, is *unwilling to scrutinize the phenomenon*. Whatever the claim, chances are he won't examine it closely even when he gets an excellent chance to do so. I get the impression that, deep down, paranormal claimants are afraid they'll see there's nothing there. Because science, *the art of looking carefully to determine the truth,* is precisely what they're afraid of, they'll reject its ability to assess their claim, perhaps with a snide reference to the inadequacy of "linear, left-brain, Western science."

Somebody Else Is On the Moon contains a fine example of this fear of scrutiny. All of Leonard's moon constructions are at the very limit of photo resolution. When he had a chance to get better photos and to see the same terrain more clearly, he didn't.

On the other hand, you might expect John Taylor, a physicist the *New Scientist* called one of the top 20 scientists in the world, to be suspicious of psychics who attempted to avoid his close scrutiny. Yet his 1975 book *Superminds* enthusiastically described his experiments with "Geller children," kids who could bend forks and spoons "psychokinetically," just like Uri Geller. The trouble was, they could only do it when no one was looking. Taylor even gave this aversion to scientific scrutiny a name: the "shyness effect." He accomodatingly designed "sealed" tubes with the objects to be bent placed inside, and sent them home with the children. When they returned bent the next day, still sealed in the tubes, he considered this proof of psychic abilities.

Taylor refused to see the magician, the Amazing Randi, who felt he could explain the shyness effect in more prosaic terms: cheating. Perhaps Taylor himself had become afraid of close scrutiny. Randi called on him anyway, disguised as a reporter, and found Taylor particularly easy to fool. In his book *The Truth About Uri Geller,* Randi describes having no trouble at all opening and closing the crudely sealed tubes in Taylor's presence, even managing to bend an aluminum bar while Taylor was momentarily distracted, scratch on it "Bent by Randi," and replace it among Taylor's collection undetected!

The final blow to Taylor's shyness effect occurred when an alternative team of scientists decided to replicate Taylor's findings. Six of his metal-bending prodigies were tested in a room with one observer, who noticed no cheating even though "psychokinetic" metal-bending occurred repeatedly. But a hidden camera recorded the truth about the shyness effect, as reported by the investigators in the September 4, 1975, issue of the scientific journal *Nature:* "A put the rod under her foot and tried

to bend it; *B, E,* and *F* used two hands to bend the spoon . . . while *D* tried to hide his hands under a table to bend the spoon." Today, Taylor has retracted many of his 1975 claims.

When my father was investigating mediums, they often claimed that the spirits would stay away if there was a skeptic in the room. So if an investigator frisked the medium for gadgets, the spirits would fail to materialize. This is a very convenient explanation for why paranormal phenomena disappear when someone looks closely, and it is invoked in many ways by New Age theorists. The Amazing Randi is strongly disliked by the modern parapsychological community, and quite unwelcome at psychic demonstrations because of this "skeptics effect." A simpler explanation for why something isn't there when you look carefully is that it isn't there at all. Beware of anyone who says you mustn't look closely.

2. Cloaks of Fuzz

This next guideline grows out of the first. Watch out for paranormal phenomena that are cloaked in *noise*.

"Noise" in this sense means any kind of confusion, static, or fuzz that obscures what you're looking for. Leonard's moon marvels are an example, lost as they are in the graininess of his photographs at the limits of resolution, where everything gets fuzzy and random.

Another example comes from the *Journal of the American Society for Psychical Research* on my father's bookshelves. One psychic investigator theorized that psychokinesis, the mind's alleged ability to move objects by will power, might depend on what elements the objects were made of. Zinc might respond differently than zirconium. The straightforward way to test this would be to suspend a piece of each element in such a way that the slightest force would move it, then sit back and concentrate on each one to see which moves in response. Of course, the objects would probably sit there and do nothing. The experimenter seemed to unconsciously realize this, so he instead fashioned dice out of different elements and rolled them thousands of times down a sloping board, concentrating on what numbers he wanted to turn up.

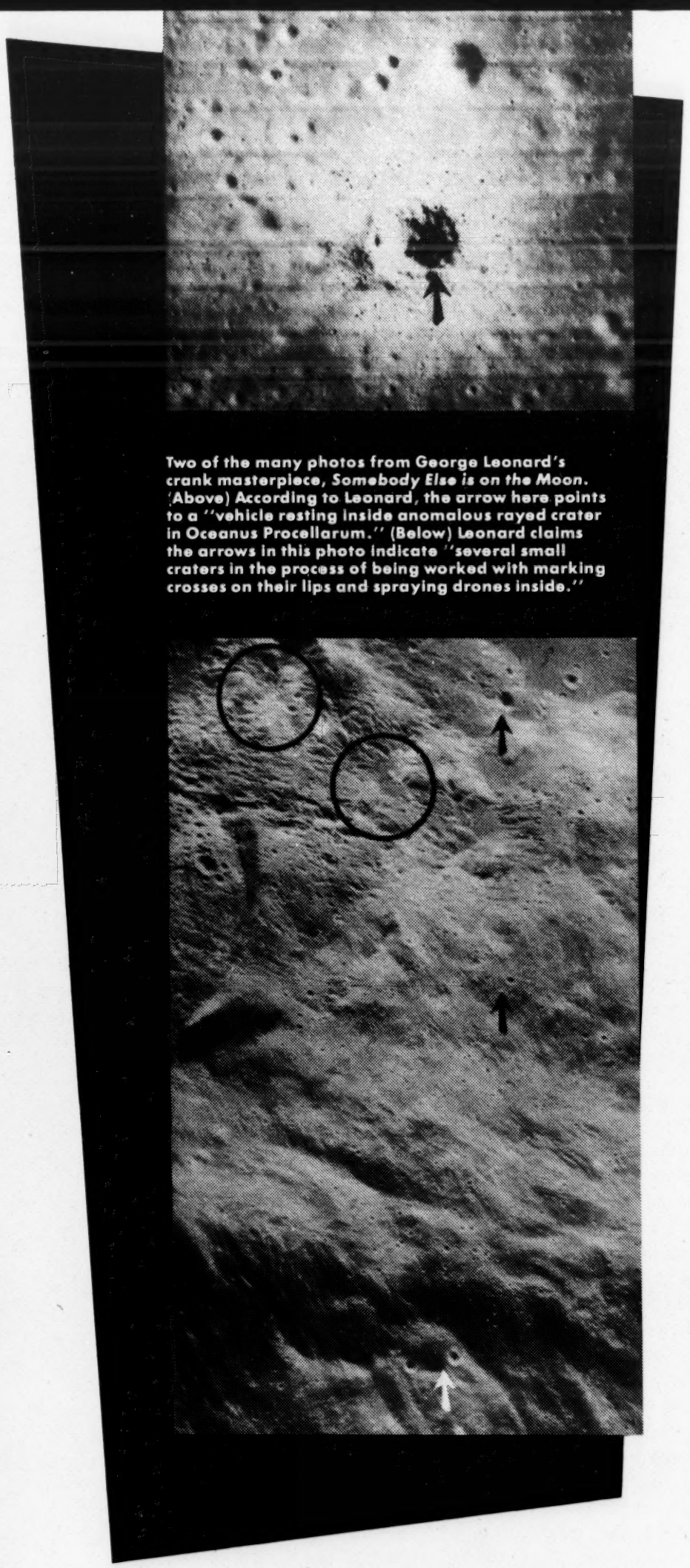
Obviously, the amount of force needed to influence bouncing dice is far greater than the force needed, say, to deflect a needle suspended on a string in a vacuum. But the rolling dice added statistical noise to the experiment, giving the researcher something to work with. His results were not clear-cut, but with a statistics-based experimental design a researcher can fiddle around endlessly, matching good and bad runs to mood, the weather, phases of the moon, sunspots, and so on, making a nice thick report for a psychical research journal.

Dr. J. B. Rhine of Duke University pioneered the

THE CASE OF ILGA K.

In 1935, the Director of the Forensic Institute of the Latvian State University in Riga, Dr. F. von Neureiter, published a monograph describing his experimental observations of a 9-year-old mentally retarded (I.Q. of 48) Latvian girl, Ilga Kirks, who supposedly was able to read the thoughts of her teacher and mother, as well as other individuals. Even though she had great difficulty reading Latvian from a book, she could read Latvian as well as foreign languages rather fluently if these were read silently by another person. Von Neureiter thought that the girl had genuine telepathic ability, and the case of Ilga K., as she is referred to in the literature, became well known both in Latvia and abroad. In 1936 and 1937, a specially formed Commission, made up of 13 professionals representing psychology, physics, medicine, and speech and hearing disorders, conducted and extensive series of tests of Ilga K. Some of these were conducted in a soundproof room and in a Faraday cage (an insulated cubicle that keeps out electromagnetic waves).
In their report, the Commission concluded that no paranormality was involved in Ilga's ability. When the agent was Ilga's mother, the word that the mother was thinking of was "sent" to her daughter by breaking it down into separate phonemes and tacking these onto the ends of the words of encouragement uttered by the mother. Ilga would pick them out and put them together into a whole word. When the mother was made to keep quiet or was isolated in a soundproof room, Ilga failed to receive, or else was only partly successful by using the highly expressive gestures and lip movements of the mother. Ilga was most successful with individuals who strongly moved their lips, tongue, and larynx while thinking or reading, which was the case with her teacher who had first brought Ilga's ability to the attention of the scientists. She could learn nothing from her mathematics teacher, whose subvocal speech was very weak, but a special teacher assigned by the Latvian Commission to tutor Ilga at home learned the communication method that Ilga and her mother were using and was able to replicate and even better the mother's performance. Ilga's ability was apparently one that she had developed on her own to compensate for her rather severe intellectual deficit. In spite of the fact that the Latvian Commission's work leaves not the slightest doubt as to the true nature of Ilga K.'s phenomenon, and the additional fact that von Neureiter was one of the Commission's members, some parapsychologists still present her case as a genuine case of telepathy, ignoring the Commission's report altogether.

—*from* Anomalistic Psychology
by Leonard Zusne and Warren H. Jones



Two of the many photos from George Leonard's crank masterpiece, *Somebody Else is on the Moon*. (Above) According to Leonard, the arrow here points to a "vehicle resting inside anomalous rayed crater in Oceanus Procellarum." (Below) Leonard claims the arrows in this photo indicate "several small craters in the process of being worked with marking crosses on their lips and spraying drones inside."

statistical approach to the study of psychic phenomena in the 1930s, and it still dominates the experimental design of modern parapsychologists, who seem to delight in devising new ways to make their experiments more complex and the results more confusing. As Albert Einstein wrote of Rhine's experiments in 1946: "I regard it as very strange that the spatial distance between the [telepathic] subjects has no relevance to the statistical [ESP] experiments. This suggests to me a very strong indication that a nonrecognized source of systematic errors may have been involved."

This data-to-noise ratio can be applied to many popular paranormal claims, such as the Shroud of Turin. The Shroud is an ancient cloth bearing the image of a mournful looking man. It is widely claimed to be the burial cloth of Jesus, imprinted by a miracle, though it turned up in a church in the 14th century and is not known to have had a prior history. A team of modern Christian scientists has produced volumes of analyses of the Shroud in an attempt to demonstrate its extraordinary characteristics. But recently, secular researchers found that the image contained a red pigment commonly used by 14th-century artists (a conclusion that few newspapers bothered to report — the public always prefers a mystery). Even before this discovery, the Shroud could have been evaluated by the data-to-noise ratio guideline.

An immediate cause for suspicion is the presence of whole museum loads of clearly false relics from the Middle Ages, when practically every church had to have a wood chip from the True Cross, a plate from the Last Supper, or one of Jesus' sandals — any single item of which would be as hard to evaluate as the Shroud itself. The Shroud appeared in the middle of all this noise. Ray N. Rogers, a leading Shroud advocate, once said that he could hardly think of a better way for the deity to prove His existence to a skeptical modern world than to leave us the Shroud. I can think of plenty of better ways, perhaps something clean and clear like materializing as a figure 50 miles tall and speaking loud enough to rattle the earth. The Shroud was a pretty forlorn miracle by comparison, lost in the trivia of the Middle Ages like a needle in a haystack — a speck of dubious data extracted from a sea of noise.

Cloaks of noise by themselves are not proof of the Shroud's inauthenticity — nor that mind power doesn't occasionally tilt a zirconium die, nor that the moon is not covered with artificial objects just a little smaller than the best photographs can show. "Noise" in information theory means, literally, that you just don't know. Data swamped in noise are unworthy of belief, and it is suspicious that evidence for the paranormal is consistently cloaked in this way.

3. Believers

Watch out for "believers." Watch out for stories told and retold. Francis Bacon said, "Man prefers to believe what he prefers to be true." A believer doesn't have to be a zealot. Anyone qualifies who possesses imagination enough to get excited at the idea that the mysterious crashing sounds in the woods just beyond the campfire might be Bigfoot.

Or that Venus sparkling in the clear dawn sky might be a flying saucer. Our beliefs may predispose us to misinterpret the facts, when ideally the facts should serve as the evidence upon which we base our beliefs.

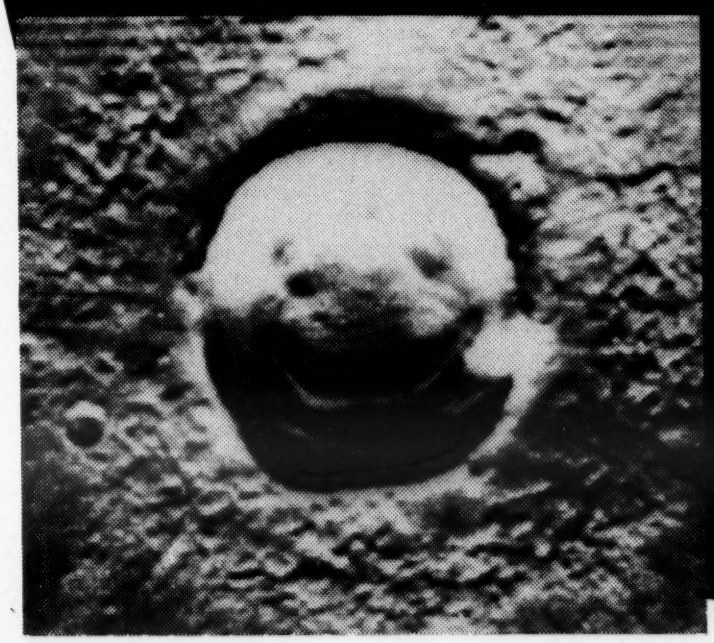
Garden-variety flying saucer sightings based on such misperceptions clutter up the UFO literature. Some UFO investigators, like the late astronomer J. Allen Hynek, have concluded that after the garbage is sorted out, a few unexplainable cases still remain. Others, like *Aviation Week and Space Technology* magazine editor Philip J. Klass, don't agree. "In twelve years of investigating some of the most famous and highly acclaimed UFO reports," says Klass, "I have yet to find one that could not be explained in prosaic terms . . . I'm not skeptical on principle, just on evidence."

Often a paranormal claim gets thoroughly debunked but continues to travel far and wide. Belief, not evidence, supplies the fuel. Lawrence Kusche, a pilot and investigator for the Committee for the Scientific Investigation of Claims of the Paranormal, scrupulously examined every allegedly mysterious disappearance in the so-called "Bermuda Triangle," for example, and found nothing really mysterious about any of them. He reported his findings in two books, *The Bermuda Triangle Mystery — Solved* and *The Disappearance of Flight 19*. These books have sold very poorly compared to sensationalistic works like Charles Berlitz's *The Bermuda Triangle*. "I assumed that people who read the weird books would naturally want to read the other side of the story and find out the truth," he commented. "I was wrong." Bermuda Triangle lore continues to percolate through American popular culture. A movie on the Triangle was released a couple of years ago, claiming to be factual. Its television ads were filled with flying saucers, underwater horrors, time warps, and planeloads of screaming people.

Some skeptics have concluded that every last paranormal mystery can be accounted for by these twin forces of true believers and tales amplified in the retelling.

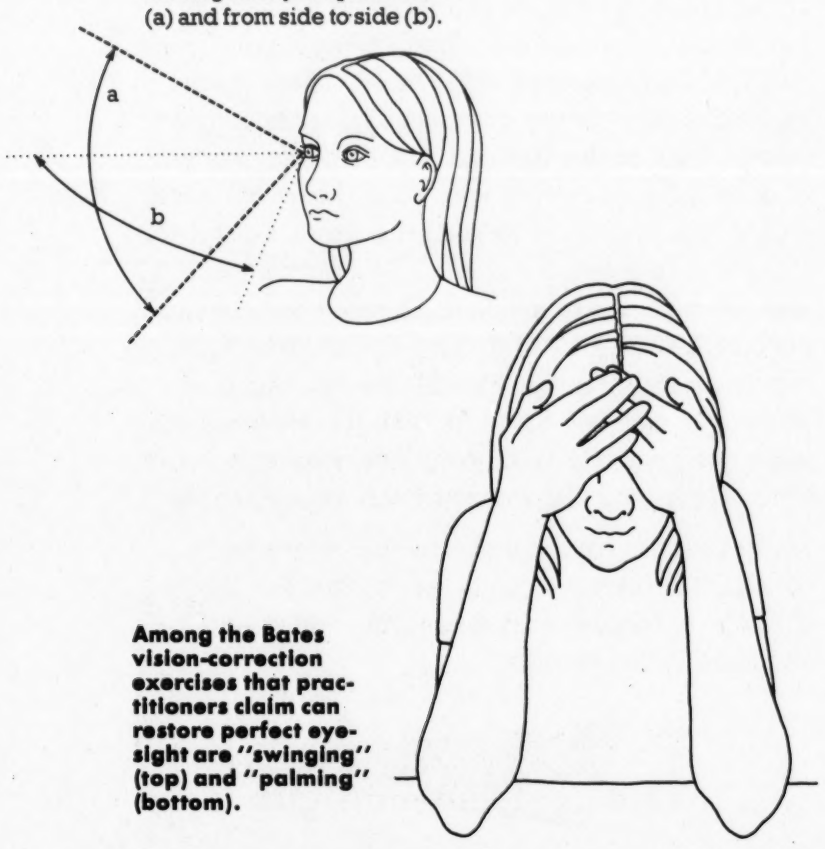
4. The Past is Prologue

Check out the history of the claim. The past can put a currently popular paranormal belief in a



THE FACE ON MARS

(Left) Two books and numerous magazine and newspaper articles have been written interpreting this mile-long feature of Martian geography as a great stone "face" carved by an ancient Martian civilization. NASA officials, who believe that the subject of this Viking 1 photograph is attributable to purely natural geological processes, were happy to supply the *Whole Earth Review* with two other photographs of curious Martian features: a five-mile-wide Happy Face and a lava flow in the form of Kermit the Frog! Pop Culture of the Gods?



Moving the eyes up and down (a) and from side to side (b).

Among the Bates vision-correction exercises that practitioners claim can restore perfect eyesight are "swinging" (top) and "palming" (bottom).

perspective that can be gained in no other way.

Many of the paranormal claims and movements of the '80s actually have long and colorful histories. One example that has made the rounds in New Age circles in recent years is the Bates vision-correction system, billed as a new, holistic way to treat poor eyesight with a series of easy exercises.

Dr. William Horatio Bates was born in 1860 and graduated from medical school in 1885. His medical career was disrupted by spells of total amnesia, but this did not prevent him from publishing, in 1920, his great work, *The Cure of Imperfect Eyesight by Treatment Without Glasses*. Bates claimed, contrary to reality, that the eye does not focus by changing the shape of the eye lens. He said that the lens never changes shape at all, and that the problems orthodox doctors attribute to imperfect lenses are actually caused by an "abnormal condition of mind" or "a wrong thought." He invented a series of exercises to correct these problems, such as "palming" the eyes with the palms of the hands, "shifting" and "swinging" vision from side to side, and reading under difficult conditions such as in dim light or on a lurching streetcar. He also advocated staring directly at the sun for brief moments (which can cause genuine eye damage).

Bates died in 1931, but disciples kept his theories alive. Dozens of popular books were published on the Bates method, and "Throw away your glasses!" became the rallying cry of an international movement in the '30s and '40s. Thousands of people sincerely believed the Bates exercises had cured them of nearsightedness, astigmatism, cataracts, and glaucoma. Unfortunately, medical tests did not bear this out.

One of the most prominent converts to the Bates system was Aldous Huxley. His corneas had been scarred since childhood, but he believed the Bates exercises had repaired them. He wrote a book about it, *The Art of Seeing*, hailed as a vindication by Bates sympathizers responding to criticisms from opthalmologists. But Huxley could be an embarrassment, too. Bennett Cerf wrote this account of the time Huxley addressed a Hollywood banquet in the April 12, 1952, *Saturday Review*:

> When he arose to make his address he wore no glasses, and evidently experienced no difficulty in reading the paper he had planted on the lectern. Had the exercises really given him normal vision? I, along with 1200 other guests, watched with astonishment while he rattled glibly on . . . Then suddenly he faltered — and the disturbing truth became obvious. He wasn't reading the address at all. He had learned it by heart. To refresh his memory he brought the paper closer to his eyes. When it was only an inch or so away he still couldn't read it, and he had to fish for a magnifying glass in his pocket. It was an agonizing moment.

Eventually the Bates movement ran its course. In 1956, a Manhattan optometrist, Philip Pollack, wrote the definitive book exposing its failures, *The Truth About Eye Exercises*. "It is a rare occasion indeed when anyone so well informed troubles to take apart a pseudoscientific cult in such a thorough and painstaking manner," wrote Martin Gardner in his 1957 book, *Fads and Fallacies in the Name of Science*. But today the Bates method has been resurrected, minus some of Bates' more obvious blunders and clothed in New Age "holistic" rhetoric. Meanwhile, the Pollack book sits forgotten on library shelves.

The pattern is common: a new paranormal claim turns out to be a very old one, debunked long enough ago for the debunking to have been forgotten. The rate at which such old, disproven, and forgotten theories are being revived shows a certain unimaginativeness in the field, as if new paranormal theories cannot be invented fast enough to meet the New Age demand. And every time they are revived, these theories gain a little more venerability. It is important to remember that tradition and venerability aren't necessarily related to *credibility*.

A few years ago I attended a natural living festival in Connecticut and noticed an iridiagnostician on the program. An iridiagnostician! I felt like a biologist discovering a living fossil.

Iridology was invented around 1880 by Ignatz Peczely of Budapest. He declared that every human disease can be diagnosed by studying the iris of the eye. He claimed — no one knows why — that the iris is divided into 40 zones that correspond to the different body parts. The zones run clockwise in one eye, counterclockwise in the other. Peczely gained disciples, and in 1904 his works were translated into English. Orthodox doctors ridiculed iridiagnosticians, who failed to treat diseases accurately when tested. (Pranksters

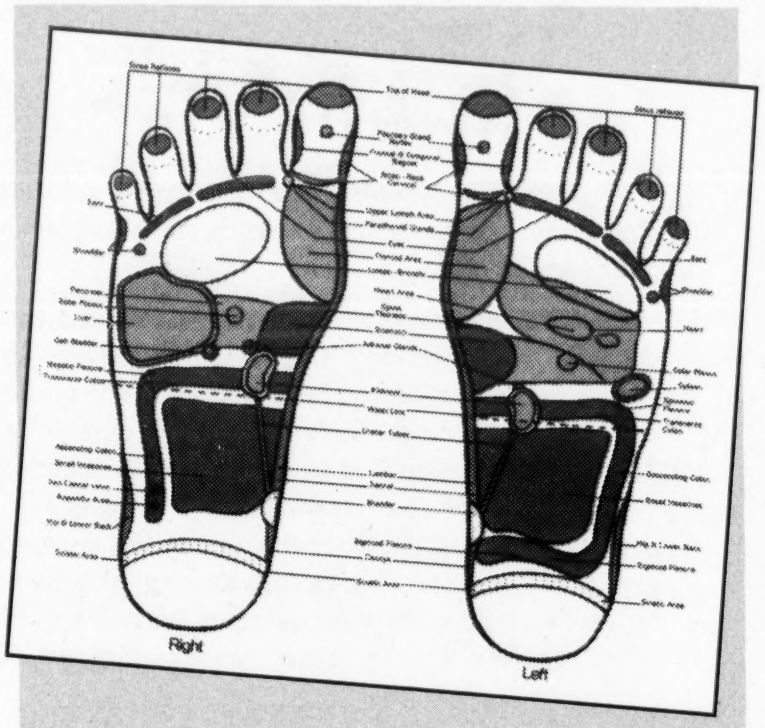
had their day, too. The *Textbook of Iridiagnosis,* fifth edition, 1921, carefully explains how to recognize glass eyes in order to avoid being caught making lengthy diagnoses of them.) The method never produced any results, and so it slowly faded away around the time of my grandfather.

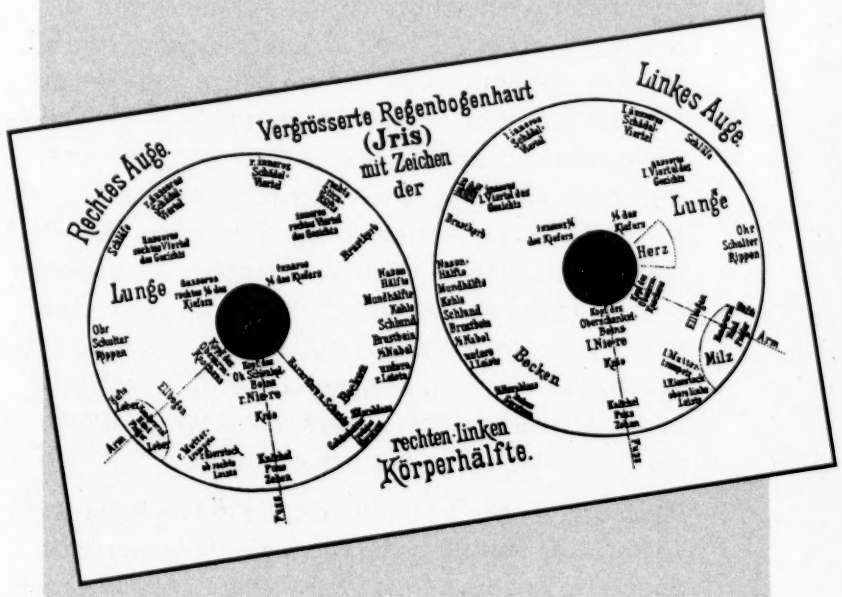
I expected the iridiagnostician at the natural living festival to be a doddering old man in his eighties, full of reminiscenses about Henry Lindlahr, J. Haskell Kritzer, and other bygone greats of the movement. But no. He was a young, hip-looking fellow as enthusiastic about iridology as if it were brand new.

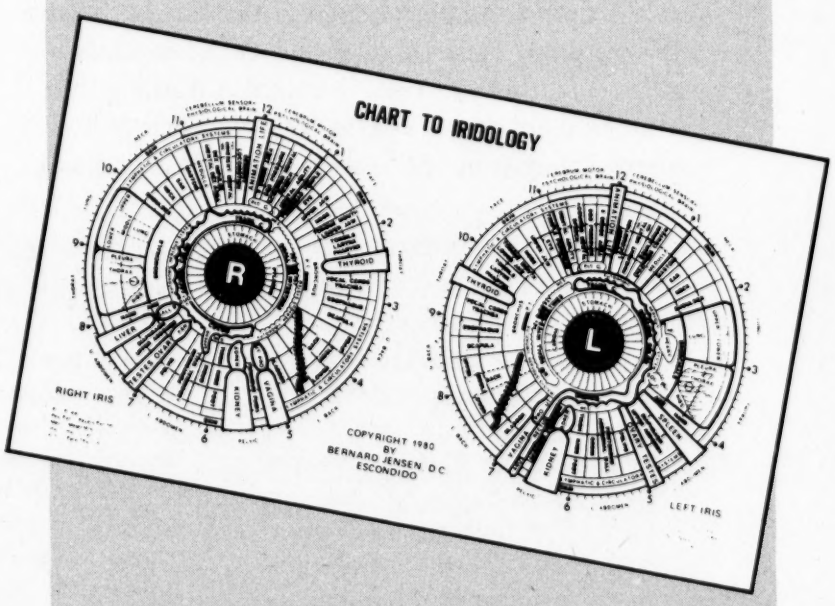
Since then, iridology has become entrenched in the holistic health scene, believed in (and financed) by thousands who never bothered to check out its full history. It has, in fact, been around long enough in its current incarnation to have undergone another round of debunkings. In 1979, University of California at San Diego researchers A. Simon, D. Worthen, and J. Mitas tested three iridologists, including Bernard Jensen, the author of the modern textbooks on the subject. The iridologists scored no better than would be expected by chance at making correct diagnoses of the illnesses of 143 patients. And in 1981, D. Cockburn at the University of Melbourne in Australia had iridologists evaluate before-and-after photos of the irises of patients who had developed acute diseases. Not only did the iridologists fail to diagnose any of the illnesses, they could find no changes in the eyes whatsoever!

A similar resurgent alternative health practice is zone therapy, based on the belief that every organ of the body is connected to a different spot on the bottom of the foot, the roof of the mouth, and the hands. Zone therapy is often linked by its practitioners with acupuncture and shiatsu massage, an association from which it derives venerability, but the truth is that, like iridology, zone therapy was another turn-of-the-century invention, by a Dr. William H. Fitzgerald of St. Francis Hospital of Hartford, Connecticut. Zone therapy flourished for a while, aided by testimonials of spectacular cures. But the cures somehow didn't endure the test of time, and the practice slowly faded out. By 1950 it was nearly extinct. Now it has been resurrected as reflexology, and poster charts of the bottom of the foot can be found in health food stores everywhere. It is currently practiced without some of Dr. Fitzgerald's more unusual treatments, like the application of tight rubber bands and spring clothes pins to various fingers and toes.

Many other past systems of bygone medical quackery have been revived in recent years, including chromotherapy (healing with colored lights), colonics (enemas), and homeopathy (where medicinal tinctures are made so dilute that not one molecule of the active ingredient remains). ►







(Top) A chart of the foot according to reflexology, the modern version of zone therapy. Practitioners claim that each region corresponds to a specific organ or portion of the anatomy, and that treatment of bodily ailments can be achieved by the application of pressure to the proper area of the foot. (Middle) Ignatz von Peczely's original iris chart and (bottom) its modern counterpart by iridologist Bernard Jensen. Like reflexologists with feet, iridologists claim that areas of the iris specifically correspond to organs and parts of the body, and that complex diagnoses can be made by the examination of the eye alone.

5. By Their Fruits You Shall Know Them

The preceding examples lead to the next guideline: Watch whether the field of study remains barren over time.

In the end, the most telling argument against the Bates system, iridology, and zone therapy was not that they were founded by cranks or were based on spurious theories, but that they bore no fruit. The Bates exercises had every chance to succeed. Thousands of people "threw away their glasses" and practiced the system religiously. Millions more gave it briefer tries. If palming, shifting, and swinging really could cure poor eyesight, glasses would be as obsolete now as horse-drawn carriages.

As physicist Rolf M. Sinclair pointed out at an American Association for the Advancement of Science meeting in 1980 in San Francisco, one of the key distinctions between science and pseudoscience is that science changes rapidly. New ideas are quickly accepted once they are proven, and disproven ideas are likewise quickly rejected. Most of the focus of current research involves ideas less than ten to fifteen years old. In contrast, pseudoscience clutches doggedly at ideas for their own sake. "Astrology froze about two thousand years ago and simply hasn't changed much," Sinclair said. "That unchanging character is what allows me to say astrology is a pseudoscience."

My father finally became inactive in the American Society for Psychical Research partly because nothing ever seemed to lead anywhere. At home we have a shelf lined with issues of the Society's *Journal,* marching back through the decades. Unlike other scientific journals, it contains nothing that one can build upon. In essence, the Society is just where it began in 1885, and where its precursor, the London Society for Psychical Research, began before that. It has yet to demonstrate that psychic powers exist at all, much less learn anything about them.

6. Crank-Watching

If someone making paranormal claims compares himself to Einstein, Galileo, or Pasteur, dismiss him right away. Real geniuses usually let their work speak for itself. If he believes he is being conspired against by the A.M.A., "orthodox oxen," and "would-be scientists" with "frozen beliefs" and "hi-de-hi mathematics" (to quote George F. Gillette, discoverer of an incomprehensible something called the "spiral maximote"), then you may safely ignore him. Paranoia is a frequent refuge of the incompetent.

The crank usually works in isolation from everyone else in his field of study, making grand discoveries in his basement. Many paranormal movements can be traced back to such people — Kirlian photography, for instance. If you pump high-voltage electricity into anything it will emit glowing sparks, common knowledge to electrical workers and hobbyists for a century. It took a lone basement crank to declare that the sparks represent some sort of spiritual aura. In fact, Kirlian photography was subjected to rigorous testing by physicists John O. Pehek, Harry J. Kyler, and David L. Faust, who reported their findings in the October 15, 1976, issue of *Science*. Their conclusion: The variations observed in Kirlian photographs are due solely to moisture on the surface of the body and not to mysterious "auras" or even necessarily to changes in mood or mental state. Nevertheless, television shows, magazines, and books (many by famous parapsychologists) continue to promote Kirlian photography as proof of the unknown.

VON DANIKEN DEBUNKS VON DANIKEN

In 1978, the PBS *Nova* television science program examined the claims of "ancient astronaut" theorist Erich Von Daniken, whose series of books beginning with *Chariots of the Gods* has sold a stunning 36 million copies. The *Nova* interviewer, pressing Von Daniken to confess that he had not really explored an artifact-filled South American cave as he had claimed in *Gold of the Gods,* obtained the following admission:

> No that did not happen, but I think when somebody writes books in my style and in my sense, which are not scientific books, we call it in German "sachbucher." It's a kind of popular book but it's not science fiction, though all the facts do exist but with other interpretations. Then an author is allowed to use effects. So some little things like this are really not important because they do not touch the facts. They are simply stimulating the reader, and one is allowed to do this.

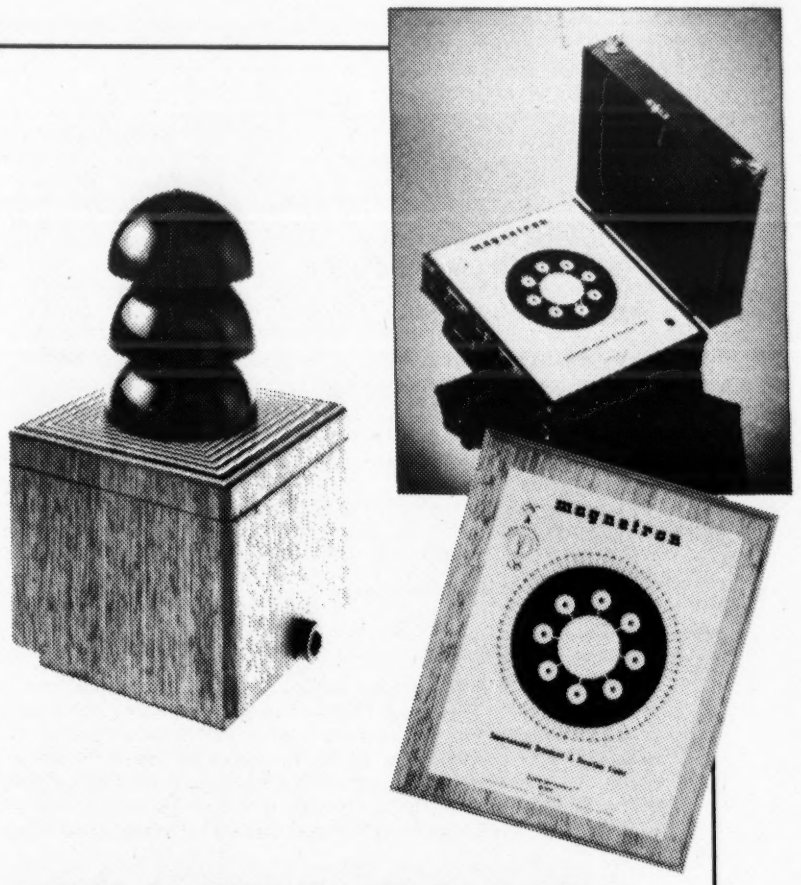
Nonetheless, Von Daniken's books are sold in America as "nonfiction." As James Randi (the magician, "The Amazing Randi") points out in his book *Flim Flam!*:

> [Von Daniken] at no point calls to our attention the miracle known as Chartres Cathedral, the Parthenon in Greece, or even Stonehenge — that most remarkable astronomical construction — *because these wonders are European,* built by people he expects to have the intelligence and ability to do such work. He cannot conceive of our brown and black brothers having the wit to conceive or the skill to build the great structures that they *did* leave behind. Instead, to satisfy what appear to be his personal prejudices, he invents some sort of divine/extraterrestrial/supernatural intervention that he maintains was necessary to enable the inferior races to put stone upon stone or place paint upon a cave wall.

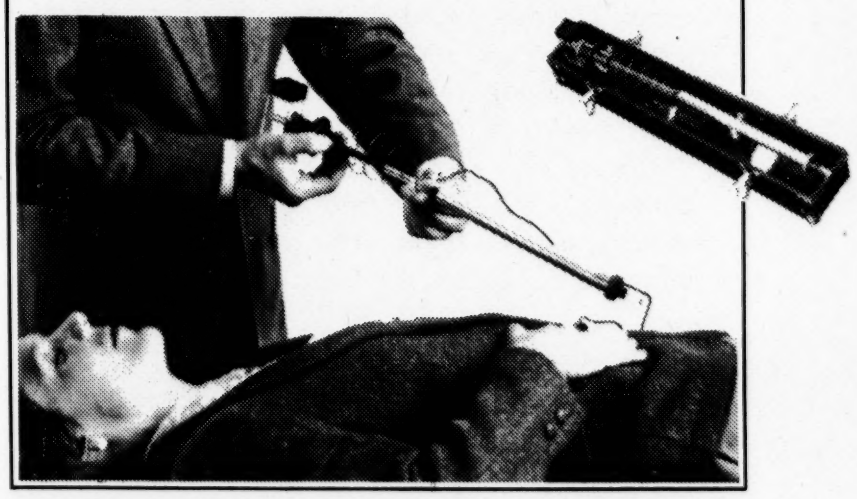
—T.S.

And finally, of course, there are plenty of outright fakes.

A fake often gives rise to a movement that endures long after the fakery is exposed. Spiritualism, the religion of my family for two generations, began in 1848 when 12-year-old Margaret Fox of Wayne County, New York, became the world's first medium. People sitting with her in a darkened room asked questions of the spirits, and unexplained rapping noises would reply. More and more people came to witness this marvel, and soon Margaret and her sisters went on tour. Much later, in 1888, she confessed it was all a hoax; she did it by snapping her big toe joint against the floor. But by now Spiritualism had grown far beyond the "spirit rapping" stage, and seances were full of flying spirit trumpets, spirit voices, gauzy figures appearing in the dark, and mediums foaming ectoplasm from all their body orifices. Spiritualists continued to revere Margaret Fox as the founder of their religion, even after her confession. Once, my grandfather took my parents to visit the Fox sisters' cabin, preserved as a sort of Spiritualist shrine. My mother remembers sitting in Margaret Fox's chair. She also learned to do the toe-snapping trick, and she can still do it. She demonstrated it for my grandfather once, but "he was very out of patience with us for being so skeptical."



In the New Age, the inventions of basement cranks can mean big money. The slick and glossy catalog from Supersensonic Energy Technologies of Boulder Creek, California, reads like a "Sharper Image" for yuppie occultists. Their Pi-Ray Coffer (above left) is supposed to "amplify the Pi-Ray field and filter out the negative green field," and can be used to "charge objects like watches, rings, and crystals." At $149.95, it's sure to filter out the green field in your wallet. For the cabalist on the go, their Magnetron XT (above right) is built into a briefcase. It "aligns the magnetic field of the Earth" for you for only $99.95. The Supersensonic Extractor Sink (below) "amplifies the natural process of excreting residual toxic vibrations through your subtle energy field." Price: $249.95.



The Self-Defeat of the New Age

In the whole panoply of the paranormal, is there anything at all that an intelligent person can believe in? Perhaps *belief* is not the issue. The *possibility* is always there. Maybe a few of the Spiritualists did get messages — no one can prove otherwise. Maybe the saucers will finally land next month and show up the skeptics once and for all. "If we are only open to those discoveries which will accord with what we already know," said Alan Watts, "we might as well stay shut." And that is as far as an honest person can go.

The real significance of the paranormal boom is that so many of us take it so uncritically. It is as if the question "Is this so?" has become irrelevant — and has been replaced by the attitude, "If it feels good, it must be right for me." This is a very fundamental shift. That an objective reality exists outside of our internal feelings and viewpoints, and that this objective reality is worth studying, is a relatively new idea in the history of the world. It did not gain a firm foothold until as late as the Renaissance, and though it rapidly led to the sciences that have transformed the world, perhaps this idea is more alien to human nature than we might think.

Today, nowhere is the rationalist paradigm "Is this so?" more roundly attacked, and its replacement, "If it feels good, it must be right," more self-consciously advocated, than in the movements that go collectively under the name "New Age." I believe this paradigm has served us poorly. It has led countless good people to squander years of their brilliance and energy on shabby falsehoods. It has been responsible for trapping others in vicious cults. It may have even short-circuited just the sort of quantum leap in human thought that our theorists keep saying is just around the corner.

Historically, paranormal movements have drawn more adherents from the right wing than from the left. No nation has a more extensive crackpot

	1919	1925	1934	1945	1950	1966	1973	1974	1975	1978	1979	1985
UFOs						48%	54%	46%		57%	59%	43%
Telepathy/ESP		36%	8%		10%			39%		51%	54%	
Precognition	20%		30%					26%		37%		
Astrology		15%	6%	18%	6.5%			25%	22%	29%		40%
Disbelieve human evolution				39%								50%
Lucky/Unlucky numbers	13%		26%					14%				40%
Fortune-telling	11%	1%	13%	1%	2%			6.5%			14%	
Palmistry		8%	15%	20%	2%			3.3%				
Faith-healing		9%		6%	5.5%			34%				
Ghosts								16%		11%		
Phrenology		40%		18%	3%			0%				
Angels										54%		
Devils										39%		

Over 50 years of American belief in the paranormal are represented in this table, based on surveys of college students and adults. The figures indicate the percentage that endorsed each of the beliefs listed. The figures for 1966, 1973, 1978, and 1985 indicate cross-sections of the U. S. adult population; the rest represent college students. It's difficult to elicit trends, especially from the older data, because of the difference in the phraseology of the questions in the various surveys. The most recent survey, conducted in 1985 by the National Science Foundation, indicates that 43 percent of the adult population believes that UFOs are alien spacecraft, 40 percent feel that astrology has scientific credibility, 50 percent disbelieve that humans evolved from earlier species of animals, and 40 percent agree that "some numbers are lucky for some people."

literature than Germany, and never did paranormal beliefs of every kind get more of a hearing than as in that country between the two World Wars. The Nazis' racial theories were only a small part of the pseudoscience that overran Germany.

One of the most widespread beliefs was the World Ice Doctrine (*Welt-Eis-Lehre*, or *WEL*), which held that the Milky Way was not made up of stars but of blocks of ice spiralling toward the earth. This pseudoscience was somehow connected with Aryan racial superiority, and the *WEL* acted almost as a political party. So successful was it that the Propaganda Ministry was obliged to announce, "One can be a good National Socialist without believing in the *WEL*." Another Nazi doctrine was that the earth is the interior of a hollow sphere, so that a line directed straight up into the sky would hit the other side of the world. The sun and stars were thought to be optical illusions in the middle. This idea was so widely accepted that a military party of 10 was dispatched to the Isle of Rugen to photograph the British fleet by pointing an infrared telescope 45 degrees up into the sky!

The sight of intelligent, educated people walking around with pyramids on their heads, a sight you are liable to witness at any New Age festival, is comical. Perhaps the next irrational movement will not be so funny.

Certainly the New Age will make no lasting progress, nor will it gain any more credibility, until we accept the fact that nature gave us heads as well as hearts. Maybe we were given heads for a good reason. Maybe it is because, in the end, only the truth can set us free. ■

REAGAN AND ASTROLOGY

U. S. President Ronald Reagan makes decisions based upon the advice of astrologers. In an interview by reporter Angela Fox Dunn that appeared in the July 13, 1980, *Washington Post*, Reagan admitted that he consulted astrologer Carroll Righter's column every day. "I believe you'll find that 80 percent of the people in New York's Hall of Fame are Aquarians," Reagan, himself an Aquarian, told her.

It is well known that the President and his wife Nancy are close friends of Carroll Righter and of astrologer/seer Jeanne Dixon. According to Dixon's former assistant, Alice Braemer, Reagan regularly consulted Dixon "two or three times a year" back in the late '60s and early '70s. Braemer told Warren Hinckle, a San Francisco *Chronicle* columnist, "They talked about everything. She told him about hot spots. She told him that he was going to be president of the United States."

When Hinckle checked this with Dixon, she agreed that she often gives Reagan advice — but never for money. "I've made suggestions and things like that, but I don't think it's right to say he formally consults me. . . . I'm not considered one of his advisers — but I advise him."

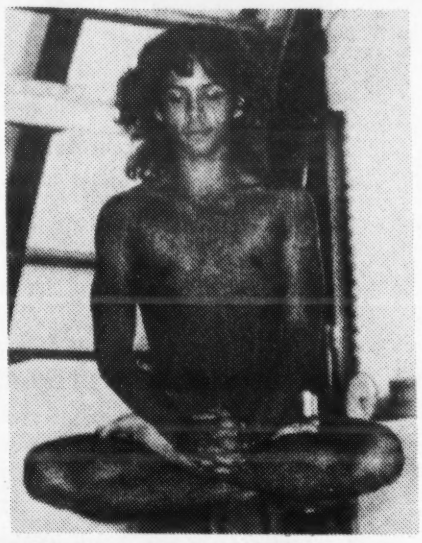
In 1980, Joyce Jillson, another popular syndicated astrologer, confirmed a rumor that she had been paid $1200 by the Reagan campaign to draw up horoscopes for eight prospective Reagan vice-presidential candidates. She told a Los Angeles *Herald Examiner* reporter that the horoscopes were a rush order so that Reagan could take them with him on a vacation to Mexico, where he would be pondering the problem of whom to choose as a running mate. Jillson's advice was that George Bush, a Gemini, would be the most compatible match for the Aquarian Reagan. Though the Republican Party denies they hired Jillson, the fact remains that Bush was the candidate ultimately chosen . . .

—T.S.

SCRUTINIZING THE PARANORMAL

Access to Skeptical Books and Magazines

by Ted Schultz



(Left) A TM student "levitating" while meditating. This is an official photo issued by the TM Ministry of Information. (Right) Steven Zeigler, with no TM instruction whatsoever and no gymnastic training, bounces on a mat in the lotus posture to duplicate the levitation stunt. This unretouched photo was illuminated by a strobe flash.

—Flim-Flam!

SENSATIONALISTIC paranormal claims sell books and magazines. Sober, sensible assessments of those claims do not. Consequently, the body of "skeptical" literature has remained small, supported by a negligible percentage of the reading public's money. This strikes me as curious, because I find the good skeptical publications at least as much fun to read as the paranormal stuff — usually lots better. The good skeptical writers are as fascinated by paranormal claims as the credulous journalists, but — unlike the "true believers" — the skeptics get to the bottom of the claims through careful examinations of history and facts. I have found more solutions to puzzling anomalies in the few years that I have been reading the skeptics than in the considerably greater number of years I have spent reading the mystery mongers.

Skeptical writers, scientists, and scholars united for the first time in 1976, calling themselves the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). They started a journal, the **Skeptical Inquirer**, which became a major vehicle for skeptical writing. In spite of the lack of public support, CSICOP took on the job of combating what it perceived as a dangerously rising tide of superstition and irrationality, spawned perhaps by a deterioration in the quality of education in both science and critical thinking. Having spent the last ten years addressing the claims of disparate paranormalists, CSICOP has recently extended its investigations to include the single most significant threat to rationalism today: certain highly organized, powerful Christian fundamentalist groups that are exerting considerable economic and political pressure in order to compromise science education in public schools. Already, textbooks have been rewritten so that descriptions of geology, biology, and astronomy will not offend proponents of "Bible science" and "creation science." We can expect a portion of CSICOP's skeptical sights to remain turned in this direction for its next decade in the battle against unreason.

Science and the Paranormal

If you just wanted to read one book of skeptical literature, this would have to be it. Twenty experts, most of them scientists, take the time to study the evidence for various paranormal claims within their areas of expertise. Botanist Arthur Galston discusses the failures to replicate "plant consciousness" research published in the sensationalistic ***Secret Life of Plants****. Astronomer Carl Sagan examines the Biblically inspired catastrophist reinterpretation of solar system history proposed in Immanuel Velikovsky's* ***Worlds in Collision****. Surgeon William Nolen reports on his extensive investigation of psychic healing. The magician James "The Amazing" Randi demonstrates his duplications of psychic "miracles." The lyrical closing chapter by M.I.T. physicist Philip Morrison redirects the reader to the genuine fountains of wonder that are the basis of all great science. This book is an intelligent, informed analysis of some of the most widely held paranormal beliefs, and a lesson in critical thinking to boot.* *—TS*

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Next Gauquelin placed an advertisement in a Paris newspaper offering: "Completely Free! Your ultra-personal horoscope; a ten page document. Take advantage of this unique opportunity. Send name, address, date and birthplace . . . "

There were about 150 replies. To each correspondent Gauquelin sent the same horoscope — the one he had received for Dr. Petiot. With each he sent a self-addressed envelope and questionnaire asking about the accuracy of the reading. Ninety-four percent of the respondents said they recognized themselves (that is, they said they were accurately portrayed in the horoscope of a man who murdered several dozen people and dissolved their bodies in quicklime), and for 90 percent this positive opinion was shared by their families and friends.

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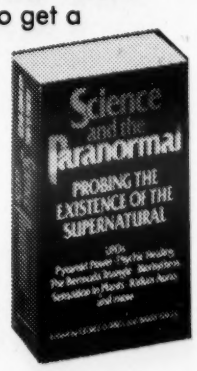
The identity of this "squadron of UFOs" not only is now known beyond all doubt, but they were photographed by an alert newspaper photographer in Peoria, Illinois, named Alan Harkrader, Jr. His photo shows a meteor fireball, with a long, luminous tail of electrified air, followed by a smaller flaming fragment, also with a long tail, flying in trail behind. Harkrader told me that he saw another fragment break off but was unable to get a photo of it.

Science and the Paranormal
George O. Abell and Barry Singer
1981; 414 pp.
$12.95
postpaid from:
Charles Scribner's Sons
Macmillan Order Dept.
Front and Brown Streets
Riverside, NJ 08075

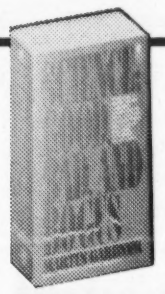


Fads and Fallacies in the Name of Science
• Science: Good, Bad, and Bogus

Martin Gardner is a well-known science writer who for years authored the "Mathematical Games" column in ***Scientific American****. His* ***Fads and Fallacies in the Name of Science****, first published in 1952, is the classic of skeptical literature. In this volume, Gardner displays some of the best qualities of a skeptical author: good writing, good research in an area fraught with obscurity, and genuine fascination for pseudoscience and crankery of all kinds. His book is a parade of eccentric people and eccentric theories: hollow and flat Earth, bizarre physics, Lysenkoism, the Bates vision-correction system, Reich's orgonomy, general semantics, parapsychology, medical quackery (always a fertile field). You'd have to spend years haunting libraries and writing away for pamphlets to assemble half of the histories and biographies that Gardner presents here in a thoroughly sane, good-humored style.*

Gardner's long-awaited sequel, ***Science: Good, Bad, and Bogus****, appeared in 1981. It's a collection of feisty essays that question a wide range of topics from the edge of science, including such current ones as human-ape communication, "physics consciousness," catastrophe theory, and Bible science. Much of the book is a damning indictment of modern parapsychology, which has attained a high degree of respectability with the general public. Needless to say, parapsychologists despise Gardner.*
—TS

Fads and Fallacies
Martin Gardner
1952; 363 pp.
$5.95
($6.80 postpaid) from:
Dover Publications
31 E. Second Street
Mineola, NY 11501
or Whole Earth Access



Science: Good, Bad, and Bogus
Martin Gardner
1981; 408 pp.
$3.95
($4.95 postpaid) from:
Avon Books
P. O. Box 767
Dresden, TN 38225

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Some idea of the worth of homeopathic medicines may be gathered from the fact that one of them (no longer used) was called *lachryma filia*, and consisted of tears from a weeping young girl. Other curious remedies are made from such substances as powdered starfish (*asterias rubens*), skunk secretion (*mephitis*), crushed live bedbugs (*cimex lectularius*), powdered anthracite coal, powdered oyster shells, and uric acid (*acidum uricum*) obtained from human urine or snake excrement.

•

Since Abrams' day, hundreds of similar electrical devices have reaped fortunes for their inventors. In Los Angeles, for example, Dr. Ruth B. Drown is currently operating an Abrams-type machine which diagnoses ailments from the "vibrations" of blood samples. She keeps a huge file of blotting papers on which are preserved samples of the blood of all her patients. By placing a sample in another machine, she can tune the device to the patient, then broadcast healing rays to him while he remains at home!
—Fads and Fallacies

•

No physicist denies that the measurement of quantum systems disturbs them, but it does not follow that there isn't something "out there," independent of our minds, to be disturbed. It is a distinction Zukav constantly blurs. The majority of today's physicists, as well as most philosophers of science, are "realists" who will find Zukav's subjective epistemology as vaguely defined as it is irritating.

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Let me summarize. Tart reported in a book, written with unbounded confidence, results so extraordinary that they far exceeded those obtained in similar testing by any other researcher. His TCT machine was found to have a flawed randomizer, and a design that permitted time-delay coding. A replication of the experiment, with both flaws eliminated, showed no significant departures from chance. Tart attributes this primarily to his inability to find sufficiently psychic students. As for the original experiment: "Because the level of scoring in the first experiment was so high, it would be absurd to argue that the results of the second experiment mean that the results of the first experiment were a mere statistical fluke." Nowhere does he even mention the possibility that the first experiment was invalid because of a defective randomizer, or fraud, or unconscious time-delay or sensory cuing.
—Science: Good, Bad, and Bogus

The Skeptical Inquirer

For years paranormalists complained: "Why don't scientists investigate this?" Now that scientists regularly take up the challenge in the pages of the ***Skeptical Inquirer****, the true believers howl "Debunkers!" and run the other way. For ten years, this journal of the Committee for the Scientific Investigation of Claims of the Paranormal has been a lone voice in a sea of irrationality. High-quality articles with plenty of references thoroughly survey and analyze all kinds of paranormal claims. Sure, there's plenty of debunking — usually right on target. Anyone who reads from the extensive literature of the paranormal has to read the* ***Skeptical Inquirer****, if only for balance. I recently purchased a complete set of back issues; you can't get this information anywhere else.* *—TS*

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The several cases of Kirlian photography we investigated where a phantom-leaf effect seemed to occur were *artifacts* and quite easy to explain. When a whole leaf is pressed against the film plane with a metal plate, moisture, dust, and a minute amount of juices are squeezed from the leaf, leaving an image. Sometimes this image could even be seen with.the eye. When the whole leaf was removed and the metal plate returned to its original position, the new photograph showed a weak, fuzzy, ill-defined, and "mysterious" shape of the missing leaf.

"Phantom Leaf Effect": (a) entire leaf aura, (b) aura of image of missing leaf shown in (a).

Flim-Flam!
• The Truth About Uri Geller

At first I was reluctant to read the works of James "The Amazing" Randi. I'd rather hear real scientists evaluate paranormal claims — why a magician? But, as Randi points out, "If you want to catch a thief, you don't call a scientist, you call a policeman." And, likewise, if you want to catch a magician posing as a psychic, you call a magician for help. The Amazing Randi is a direct descendant of Harry Houdini's crusade against the fraudulence of Spiritualism. He's been able to duplicate all of the feats of the psychics who've been tested and touted as genuine by prestigious parapsychologists. In fact, his book ***The Truth About Uri Geller*** *is a chronicle of credulity that brings into question the foundations of that branch of science. Randi's major contention has always been that parapsychological experiments must be designed to eliminate the possibility of trickery and, indeed, whenever he's been consulted before the testing of a psychic, the "miracles" have failed to occur. Uri Geller refuses to perform in his presence.*

More so than scientists, Randi is a lifelong expert when it comes to human credulity, chicanery, self-deception, and the will to believe. His book ***Flim-Flam!*** *is an excellent overview of paranormal claims that analyzes medical humbugs, psychic photography, Transcendental Meditation, ancient astronauts, UFOs, et al. Plentiful photographs catch hoaxers in the act. In both books, Randi comes off as a spirited fellow with an engaging sense of showmanship who has found his noble purpose: stripping away the flim-flam to expose the truth.* —TS

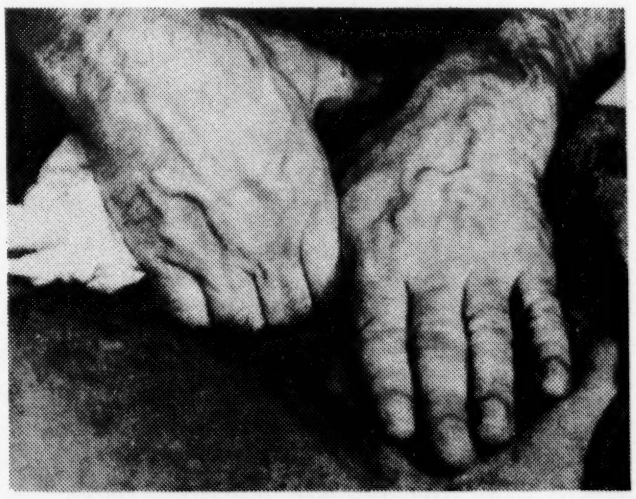
•

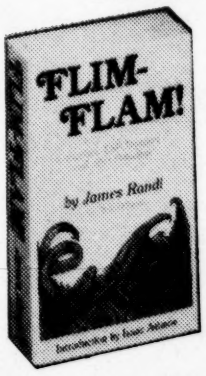
I almost felt sorry for what I had to do. I knew that in the next hour or so Andy [Weil] was going to be badly shaken up, and I wanted very much to preserve his faith in his own powers of observation while convincing him that he had been only one of hundreds of competent people who had been "taken in" by Geller's skill and reputation. That they are fooled is only testimony to their humanity; it does not reflect on their mentality. I wanted Andy spared any undeserved embarrassment.

—*The Truth About Uri Geller*

"Psychic surgery": The author's hands apparently enter the body of the subject. The fingers of the right hand are merely folded under to create the illusion that the body is being penetrated. The copious flow of blood was obtained from a piece of balloon (seen on the left), which was extracted from the liquid as if it were a tumor.

—***Flim-Flam!***





Flim-Flam!
James Randi
1982; 342 pp.
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($13.95 postpaid) from:
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700 East Amherst Street
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or Whole Earth Access

The Truth About Uri Geller
James Randi
1975; 235 pp.
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Creation/Evolution

"Bible science" and "creation science" are large movements with a lot of clout. Though they are gaining ground, these Christian fundamentalists have so far been unsuccessful in legally achieving equal status for their views in public science education; nonetheless, they've been able to intimidate many science teachers and to influence the rewriting of textbooks by exerting pressure on publishing companies. Bible scientists push their views of "flood geology," creationism, anti-evolutionism, revisionist astronomy (e.g., the universe is only 6,000 years old), and even geocentrism not as religion, but as science, claiming as much evidence for their views as secular scientists have for theirs. By so claiming, they enter the realm of empiricism, where their ideas can be tested. And tested they are, in this excellent little journal put out on a shoestring and written by scientists who have paused from their researches in order to take seriously and analyze Bible science claims.

Creation/Evolution *does the double duty of correcting erroneous interpretations of nature and educating about the evidence of paleontology, biochemistry, biology, geology, and astronomy that has led to the ideas of genetics, evolution, and the determination of the ages of the Earth and solar system. It also keeps readers up to date on the latest intrusions of religion into the areas of textbook publishing, public education, and public policy.* —TS

•

Creationists are quick to point out error by scientists, and ridicule it. They go on to argue that error and disagreement among specialists are indications that the fabric of science is coming apart, and that it will eventually collapse, with creationism reigning triumphant after Armageddon. But what creationists ridicule as guesswork, and trial and error, and flip-flopping from theory to theory, are the very essence of science, the stuff of science. Error correction is part of the creative element in the advance of science, and when disagreement occurs, it means not that science is in trouble but that errors are being corrected and scientific advances are being made. Creationism comes on the scene arguing that the Bible is inerrant as a source of scientific truth and that "creation science" cannot admit of error because it simply does not exist.

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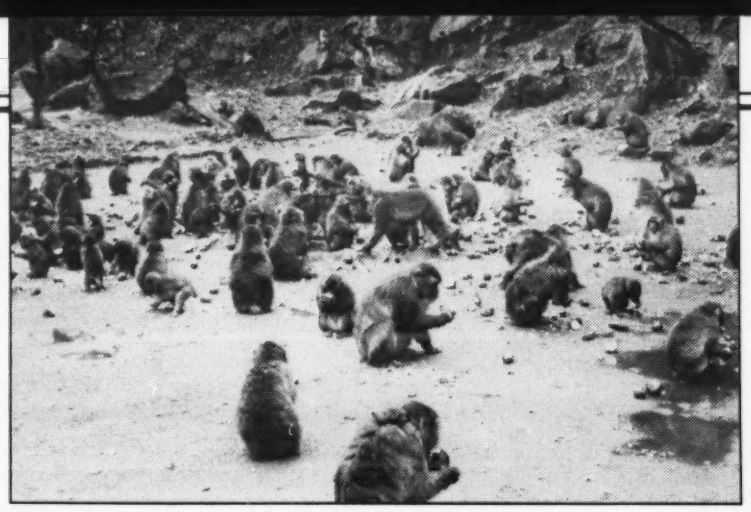


J. Itani

Japanese macaque monkeys feed on sweet potatoes at the Takasakiyama provisioning site, 1963.

"There were these Japanese scientists in the '50s who left potatoes out every day for these wild monkeys on Koshima Island and then watched what they did. One of these monkeys learned to wash the potatoes and began teaching this to the others. Then, when a certain number had learned, maybe a hundred — scientists call this a 'critical mass' — an amazing thing happened. Suddenly, *all* the monkeys knew how to wash potatoes, even monkeys on other islands hundreds of miles away! Scientists consider this to be conclusive proof of a telepathic 'group mind.'"

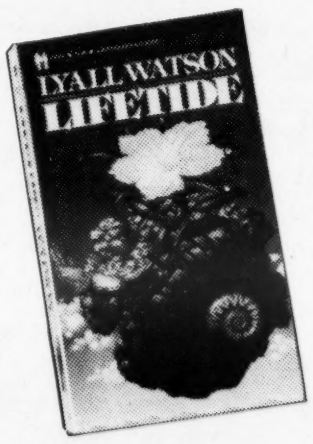
You've probably heard the story. It's been repeated in scores of books and magazine articles — even a movie. Most people seem to regard it as "just another amazing scientific fact," when in reality the story implies that telepathy in monkeys has been accepted by science since the 1950s — a staggering assertion. In fact, the "Hundredth Monkey" story was first told by a writer on paranormal subjects named Lyall Watson in his 1979 book,* Lifetide. *But the popularity of the tale is due largely to Ken Keyes, Jr., a human-potential guru whose 1982 book* The Hundredth Monkey *has been through ten printings and sold over a million copies.

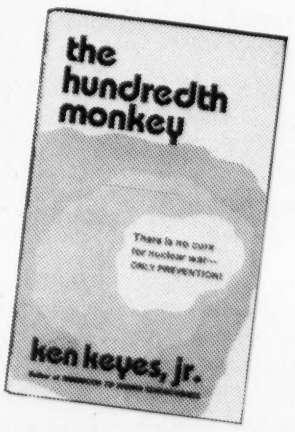
The odd and discouraging feature of the many published retellings of Watson's paranormal tale is that not one of the writers bothers to ask "Did this story really happen?" — certainly the first question to cross my mind when I heard it. The first published skeptical evaluation of this modern myth was written by psychologist Maureen O'Hara, who criticized the story in the July 1983* Association of Humanistic Psychology Newsletter *and again in the Winter 1985* Journal of Humanistic Psychology. *The response from many of her colleagues was one of hostility. They regarded her concern for objective truth as petty; their counterreplies paraphrased the New Age axiom "if it feels good, it must be right."

In this issue of* Whole Earth Review, *we have chosen to give the Hundredth Monkey story a thorough scrutiny, not only because it is extremely widespread in human potential, New Age, and even nuclear freeze circles (Keyes' book is primarily a proposal for using Hundredth Monkey-style telepathic consciousness to prevent nuclear war), but also because it represents the tip of an iceberg of growing confusion between speculation and proven fact, prevalent, as we shall see, even in scholarly circles. This confusion is often deliberately reinforced by writers and public figures whose motivation is to push a particular theory or belief system, and by publishers who have found that representing sensationalistic claims as science sells books and magazines.

We begin with Ron Amundson's definitive answer to the question, "Did the Hundredth Monkey phenomenon really happen?" — followed by the first published response from the inventor of the story himself, Lyall Watson. Primatologist Michael Huffman examines the genuine significance of the potato washing monkeys. And finally, Maureen O'Hara, the psychologist who first questioned the story, presents her analysis of the current trend toward pseudoscience and superstition in the humanistic community. By combining the testimony of these four expert witnesses, we can begin to construct a composite portrait of this literally mythic beast that has become one of the most enthusiastically received symbols of the New Age.

—Ted Schultz





The books that started it all: Lyall Watson's *Lifetide* (1979) and Ken Keyes' *The Hundredth Monkey* (1982). The latter has been through ten printings and sold over a million copies.

THE HUNDREDTH MONKEY

DEBUNKED

by Ron Amundson
Illustrated by Norman Dog

CLAIMS OF THE PARANORMAL are supported in many ways. Personal reports ("I was kidnapped by extraterrestrials"), appeals to puzzling everyday experiences ("Did you ever get a phone call from someone you had just dreamed about?"), and references to "ancient wisdom" are a few. Citations of actual scientific results are usually limited to ESP experiments and a few attempts to mystify further the already bizarre discoveries of modern physics. But the New Age is upon us (we're told) and New Age authors like Rupert Sheldrake (*A New Science of Life*) and Lyall Watson *(Lifetide)* support their new visions of reality with scientific documentation. Sheldrake has a bibliography of about 200 listings, and Watson lists exactly 600 sources. The sources cited are mostly respectable academic and scientific publications. The days of "[unnamed] scientists say" and "Fred Jones, while walking alone in the woods one day . . ." are gone. Or are they?

I teach college courses in epistemology, in the philosophy of science, and in pseudoscience and the occult. Students in these courses naturally bring to class examples of remarkable and paranormal claims. During the past few years, one such claim has become especially popular: the "Hundredth Monkey Phenomenon." This phenomenon was baptized by Lyall Watson, who documents the case with references to five highly respectable articles by Japanese primatologists Kinji Imanishi, Masao Kawai, Syunzo Kawamura, and Atsuo Tsumori. Watson's discussion of this phenomenon covers less than two pages. (Except where noted, all references to Watson are to pages 147 and 148 of *Lifetide.)* But this brief report has inspired much attention. Following Watson, a book by Ken Keyes, an article in *The Brain/Mind Bulletin,* and a film by Elda Hartley have each been created with the title "The Hundredth Monkey." In addition, we find an article entitled "The 'Hundredth Monkey' and Humanity's Quest for Survival" in the *Phoenix Journal of Transpersonal Anthropology,* and an article called "The Quantum Monkey" in *Science Digest.* Each relies on Watson as the sole source of information on the remarkable and supernatural behavior of primates.

The monkeys referred to are indeed remarkable. They are Japanese macaques (*Macaca fuscata),* which live in wild troops on several islands in Japan. They have been under observation for years. During 1952 and 1953 the primatologists began "provisioning" the troops — providing

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Ron Amundson is a professor of philosophy at the University of Hawaii at Hilo, where he specializes in the philosophy of science. He spent the 1985-86 academic year on sabbatical at Stephen Jay Gould's laboratory in the Museum of Comparative Zoology at Harvard, studying the historical influence of the theory of evolution on the development of experimental psychology. Intrigued by the extraordinary implications of the Hundredth Monkey story, he decided to investigate for himself. The result is this article, which originally appeared in the Summer 1985 issue of the Skeptical Inquirer *(see review, page 16).*
—Ted Schultz

Imo was a "monkey genius," Watson tell us, and potato washing is "comparable to the invention of the wheel."

them with such foods as sweet potatoes and wheat. This kept the monkeys from raiding farms and also made them easier to observe. The food was left in open areas, often on beaches. As a result of this new economy, the monkeys developed several innovative forms of behavior. One of these was invented in 1953 by an 18-month-old female that the observers named "Imo." Imo was a member of the troop on Koshima Island. She discovered that sand and grit could be removed from the sweet potatoes by washing them in a stream or in the ocean. Imo's playmates and her mother learned this trick from Imo, and it soon spread to other members of the troop. Unlike most food customs, this innovation was learned by older monkeys from younger ones. In most other matters, the children learn from their parents. The potato-washing habit spread gradually, according to Watson, up until 1958. But in the fall of 1958 a remarkable event occurred on Koshima. This event formed the basis of the "Hundredth Monkey Phenomenon."

The Miracle on Koshima

According to Watson, all of the juveniles on Koshima were washing their potatoes by early 1958, but the only adult washers were those who had learned from the children. In the fall of that year something astounding happened. The exact nature of the event is unclear. Watson says:

> One has to gather the rest of the story from personal anecdotes and bits of folklore among primate researchers, because most of them are still not quite sure what happened. And those who do suspect the truth are reluctant to publish it for fear of ridicule. So I am forced to improvise the details, but as near as I can tell, this is what seems to have happened. In the autumn of that year an unspecified number of monkeys on Koshima were washing sweet potatoes in the sea. . . . Let us say, for argument's sake, that the number was ninety-nine and that at eleven o'clock on a Tuesday morning, one further convert was added to the fold in the usual way. But the addition of the hundredth monkey apparently carried the number across some sort of threshold, pushing it through a kind of critical mass, because by that evening almost everyone was doing it. Not only that, but the habit seems to have jumped natural barriers and to have appeared spontaneously, like glycerine crystals in sealed laboratory jars, in colonies on other islands and on the mainland in a troop at Takasakiyama.

A sort of group consciousness had developed among the monkeys, Watson tells us. It had developed suddenly, as a result of one last monkey's learning potato washing by conventional means. The sudden learning of the rest of the Koshima troop was not attributable to the normal one-monkey-at-a-time methods of previous years. The new phenomenon of group consciousness was responsible not only for the sudden learning on Koshima but for the equally sudden acquisition of the habit by monkeys across the sea. Watson admits that he was forced to "improvise" some of the details — the time of the day, the day of the week, and the exact number of monkeys required for the "critical mass" were not specified in the scientific literature. But by evening (or at least in a very short period of time) almost everyone (or at least a large number of the remaining monkeys) in the colony had suddenly acquired the custom. This is remarkable in part because of the slow and gradual mode of acquisition that had typified the first five years after Imo's innovation. Even more remarkable was the sudden jumping of natural boundaries, apparently caused by the Koshima miracle.

Documentation

To be sure, we must not expect too much from Lyall Watson's sources. Watson has warned us that the complete story was not told and that he was "forced to improvise the details." But we should expect to find some evidence of the mysteriousness of the Koshima events of 1958. In particular, we should expect to find evidence of an episode of sudden learning within the troop at this time (though perhaps not in one afternoon) and evidence of the sudden appearance of potato washing in other troops sometime soon after the Koshima event. We also have a negative expectation of the literature; it should *fail* to report certain important details. It will not (we expect) tell us the exact number of monkeys washing potatoes prior to or after the event of 1958, nor will it provide us with an explanation of how the post-event Koshima learners were able to acquire their knowledge. After all, it is Watson's claim that the event produced *paranormal* learning of potato washing. These three expectations will be tested against the literature. Was there a sudden event at Koshima? Did acquisition at other colonies follow closely the Koshima event? Does Watson

improvise details *only* when the cited literature fails to provide adequate information? The following comments will be restricted to the literature on macaques actually cited by Watson.

Almost all of the information about the Koshima troop appears in a journal article by Masao Kawai in 1965; the other articles are secondary on this topic. Kawai's article is remarkably detailed in its description of the Koshima events. The troop numbered 20 in 1952 and grew to 59 by 1962. (At least in the numerical sense, there was never a "hundredth monkey" on Koshima.) Watson states that "an unspecified number" of monkeys on Koshima had acquired the potato-washing habit by 1958. Actually this number was far from unspecified. Kawai's data allows the reader to determine the dates of acquisition of potato washing (and two other food behaviors), as well as the dates of birth and geneological relationships, *of every monkey in the Koshima troop from 1949 to 1962.* In March 1958, exactly 2 of 11 monkeys over seven years old had learned potato washing, while exactly 15 of 19 monkeys between two and seven had the habit. This amounts to 17 of 30 noninfant monkeys. There is no mention in this paper (or in any other) of a sudden learning event in the fall of 1958. However, it is noted that by 1962, 36 of the 49 monkeys had acquired the habit. So both the population and the number of potato washers had increased by 19 during this four-year period. Perhaps this is what suggested to Watson that a sudden event occurred in the fall of 1958. And perhaps (since one can only surmise) this idea was reinforced in Watson's mind by the following statement by Kawai: "The acquisition of [potato washing] behavior can be divided into two periods; before and after 1958."

So Kawai does not give a time of year, a day of the week, or even the season for any sudden event in 1958. But he does at least identify the year. And is Kawai mystified about the difference between pre- and post-1958 acquisition? Is he "not quite sure what happened?" Is he reluctant to publish details "for fear of ridicule?" No, he publishes the whole story, in gothic detail. The post-1958 learning period was remarkable only for its normalcy. The period from 1953 to 1958 had been a period of exciting innovation. The troop encountered new food sources, and the juveniles invented ways of dealing with these sources. But by 1958, the innovative youth had become status quo adults; macaques mature faster than humans. The unusual juvenile-to-adult teaching methods reverted to the more traditional process of learning one's food manners at one's mother's knee. Imo's first child, a male named

According to Watson, a sort of group consciousness had developed among the monkeys.

"Ika," was born in 1957. Imo and her former playmates brought up their children as good little potato-washers. One can only hope that Ika has been less trouble to his Mom than Imo was to hers. Kawai speaks of the innovative period from 1953 to 1958 as "individual propagation" and the period after 1958 as "precultural propagation." (This latter term does not indicate anything unusual for the monkey troops. The troops under normal circumstances have behavioral idiosyncrasies and customs that are passed along within the group by "pre-cultural" means. The expression only indicates a reluctance to refer to monkey behavior as genuinely "cultural.")

So there was nothing left unsaid in Kawai's description. There was nothing mysterious, or even sudden, in the events of 1958. Nineteen fifty-eight and 1959 were the years of maturation of a group of innovative youngsters. The human hippies of the 1960s now know that feeling. In fact 1958 was a singularly poor year for habit acquisition on Koshima. Only two monkeys learned to wash potatoes during that year, young females named Zabon and Nogi. An average of three a year had learned potato washing during the previous five years. There is no evidence that Zabon and Nogi were psychic or in any other way unusual.

Let us try to take Watson seriously for a moment longer. Since only two monkeys learned potato washing during 1958 (according to Watson's own citation), one of them must have been the "Hundredth Monkey." Watson leaves "unspecified" which monkey it was, so I am "forced to improvise" and "say, for argument's sake" that it was Zabon. This means that poor little Nogi carries the grim metaphysical burden of being the "almost everyone in the colony" who, according to Watson, suddenly and miraculously began to wash her potatoes on that autumn afternoon.

Watson claims that the potato-washing habit "spontaneously" leaped natural barriers. Is there evidence of this? Well, Japanese primatologists Masao Kawai and Atsuo Tsumori

report that the behavior was observed off Koshima, in at least five different colonies. Their reports specifically state that the behavior was observed only among a few individual monkeys and that it had not spread throughout a colony. There is no report of when these behaviors occurred. They must have been observed sometime between 1953 and 1967. But there is nothing to indicate that they followed closely upon some supposed miraculous event on Koshima during the autumn of 1958, or that they were in any other way remarkable. In fact there is absolutely no reason to believe in the 1958 miracle on Koshima. There is every reason to deny it. Watson's description of the event is refuted *in great detail* by the very sources he cites to validate it. In contrast to Watson's claims of a sudden and inexplicable event, "Such behavior patterns seem to be smoothly transmitted among individuals in the troop and handed down to the next generation," according to Tsumori.

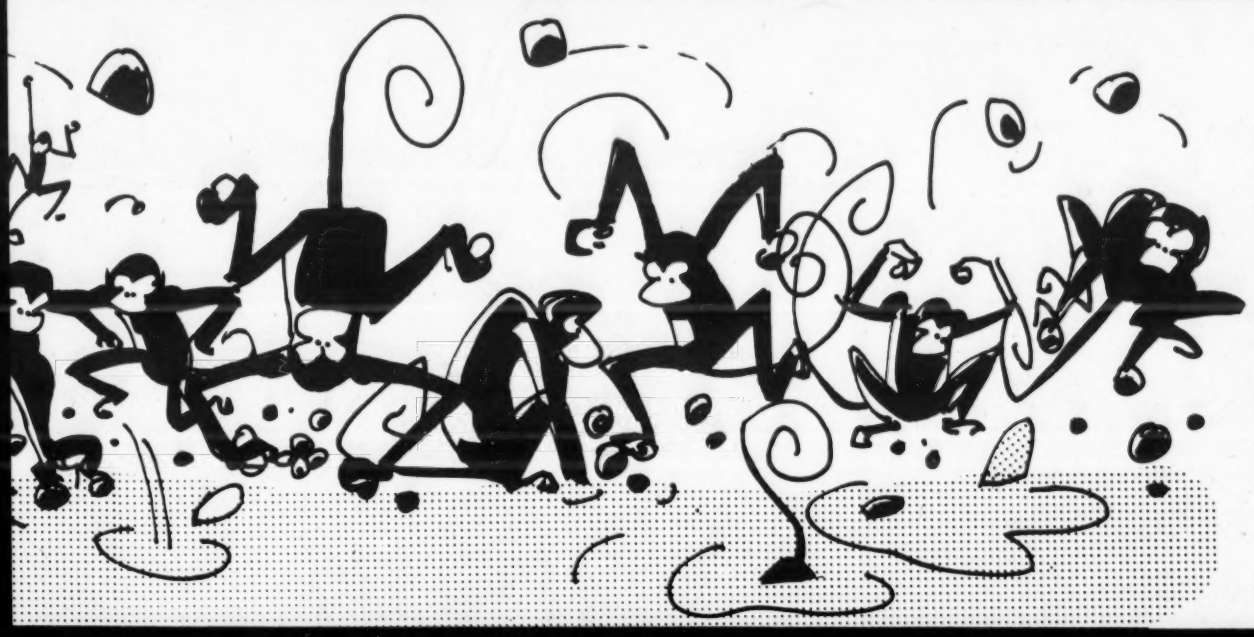
Methodology of Pseudoscience

The factual issue ends here. Watson's claim of a "Hundredth Monkey Phenomenon" is conclusively refuted by the very sources he cites in its support. He either failed to read or misreported the information in these scientific articles. But Watson's own mode of reasoning and reporting, as well as the responses he has inspired in the popular literature, deserve attention. They exemplify the pseudoscientific tradition. Consider the following:

1. Hidden sources of information: Watson informs us that the scientific reports leave important data "unspecified." This is simply false. But, more subtly, he tells us that most of the researchers are still unsure of what happened and that those who "do suspect the truth are reluctant to publish it for fear of ridicule." In one fell swoop Watson brands himself as courageous, explains why no one else has dared report this miraculous phenomenon, and discourages us from checking the cited literature for corroboration. Watson got the real story from "personal anecdotes and bits of folklore among primate researchers." Those of us who don't hobnob with such folks must trust Watson. The technique was effective. Of the commentaries I have found on the Hundredth Monkey Phenomenon, not one shows evidence of having consulted the scientific sources cited by Watson. Nonetheless, each presents Watson's fantasy as a scientifically authenticated fact. Nor is additional information available from Watson. I have written both to Watson and to his publishers requesting such information and have received no reply.

2. Aversion to naturalistic explanations: The fact is that potato washing was observed on different islands. Watson infers that it had traveled in some paranormal way from one location to another. Like other aficionados of the paranormal, Watson ignores two plausible explanations of the concurrence of potato washing. First, it could well have been an independent innovation — different monkeys inventing the same solution to a common problem. This process is anathema to the pseudoscientist. The natives of the Americas simply *could not have* invented the pyramid independently of the Egyptians — they just didn't have the smarts. In more extreme cases (Erich von Daniken, for example) a *human being* is just too dumb to invent certain clever things — extraterrestrials must have done it.

Watson assumes that Imo was the only monkey capable of recognizing the usefulness of washing potatoes. In his words, Imo was "a monkey genius" and potato washing is "comparable almost to the invention of the wheel." Monkeys on other islands were too dumb for this sort of innovation. But keep in mind that these monkeys didn't even *have* potatoes to wash before 1952 or 1953, when provisioning began. Monkeys in at least five locations had learned potato washing by 1962. This suggests



From Keyes one gets the image of spontaneous mass orgies of spud-dunking.

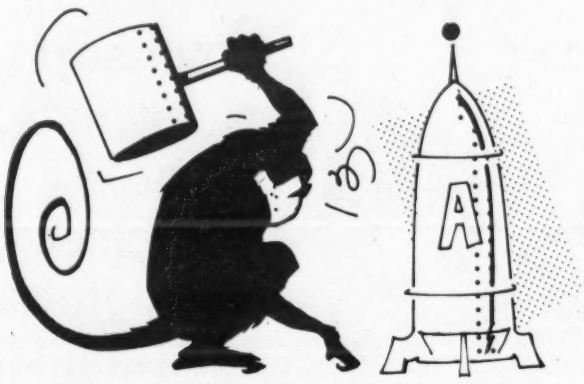
to me that these monkeys are clever creatures. It suggests to Watson that *one* monkey was clever and that the paranormal took care of the rest. A second neglected explanation is natural diffusion. And indeed Kawai reports that in 1960 a potato washer named "Jugo" swam from Koshima to the island on which the Takasakiyama troop lives. Jugo returned in 1964. Watson does not mention this. The Japanese monkeys are known to be both clever and mobile, and either characteristic might explain the interisland spread of potato washing. Watson ignores both explanations, preferring to invent a new paranormal power.

3. Inflation of the miracle: As myths get passed along, everyone puffs them up a bit. The following two examples come from second-generation commentaries that quote extensively from Watson. Nevertheless, even Watson's claims are beginning to bulge. First, the primatologists' reports had mentioned that only a few isolated cases of off-Koshima potato washing were observed. Watson reports this as the habit's having "appeared spontaneously . . . in colonies on other islands." Not actually false, since the few individuals were indeed *in* other colonies (though only individuals and not whole colonies adopted the behavior). Following Watson, Ken Keyes reports that, after the hundredth Koshima monkey, "colonies of monkeys on other islands . . . began washing their sweet potatoes!" From Keyes, one gets the image of spontaneous mass orgies of spud dunking. A second example: Regarding the primatologists' attitudes toward the events of 1958, Watson reports only that they are "still not quite sure what happened." But the primatological confusion quickly grows, for *Science Digest* reports "a mystery which has stumped scientists for nearly a quarter of a century." In these two particular cases, Watson's own statements are at least modest. They're not what one would call accurate, but not exorbitantly false either. By the second generation, we find that "not quite sure what happened" becomes "stumped for nearly a quarter of a century," and the habit that *appeared in* individuals within colonies of monkeys becomes a habit *of* colonies of monkeys. Please keep in mind that the second generation relies *only* on Watson for its information; even Watson's none-too-accurate report has been distorted — and not, needless to say, in the direction of accuracy.

4. The paranormal validates the paranormal: The validity of one supernatural report is strengthened by its consistency with other such reports. Watson's commentators show how this works. Keyes supports the Hundredth Monkey Phenomenon by its consistency with J. B. Rhine's work at Duke, which "demonstrated" telepathy between individual humans. "We now know that the strength of this extrasensory communication can be amplified to a powerfully effective level when the consciousness of the 'hundredth person' is added." Elda Hartley's film *The Hundredth Monkey* invokes Edgar Cayce. And in a remarkable feat of group consciousness, *four of the five* secondary sources emphasize the similarities between Watson's Hundredth Monkey Phenomenon and Rupert Sheldrake's notion of the "morphogenetic field" (a mysterious patterning field generated by a natural system that organizes subsequent, similar systems). The spontaneous recognition of the similarities between Watson and Sheldrake seems to have leaped the natural boundaries between the four publications! Now *there's* a miracle! (Surely independent invention or natural diffusion couldn't account for such a coincidence.)

Conclusions

I must admit sympathy for some of the secondary sources on the Hundredth Monkey Phenomenon. This feeling comes from the purpose for which the phenomenon was cited. Ken Keyes' book uses the phenomenon as a theme, but the real topic of the book is nuclear disarmament. Arthur Stein's article in the



We can only hope that Santa Claus and the Hundredth Monkey are not our best chances to avoid nuclear war.

Phoenix Journal of Transpersonal Anthropology and (to a lesser extent) the Hartley film are inspired by Keyes' hope that the Hundredth Monkey Phenomenon may help prevent nuclear war. The message is that "you may be the Hundredth Monkey" whose contribution to the collective consciousness turns the world away from nuclear holocaust. It is hard to find fault in this motive. For these very same reasons, one couldn't fault the motives of a child who wrote to Santa Claus requesting world nuclear disarmament as a Christmas present. We can only hope that Santa Claus and the Hundredth Monkey are not our best chances to avoid nuclear war.

Watson's primary concern is not prevention of war but sheer love of the paranormal. His book begins with a description of a child who, before Watson's own eyes, and with a "short implosive sound, very soft, like a cork being drawn in the dark," psychically turned a tennis ball inside out — fuzz side in, rubber side out — without losing air pressure. Just after the Hundredth Monkey discussion, Watson makes a revealing point. He quotes with approval a statement attributed to Lawrence Blair: "When a myth is shared by large numbers of people, it becomes a reality." This sort of relativist epistemology is not unusual in New Age thought. I would express Blair's thought somewhat differently: "Convince enough people of a lie, and it becomes the truth." I suggest that someone who accepts this view of truth is not to be trusted as a source of knowledge. He may, of course, be a marvelous source of fantasy, rumor, and pseudoscientific best-sellers.

I prefer epistemological realism to this sort of relativism. Truth is not dependent on the numbers of believers or on the frequency of published repetition. My preferred epistemology can be expressed simply: Facts are facts. There is no Hundredth Monkey Phenomenon. ■

Lyall Watson Responds...

I find the cavils of self-appointed committees for the supression of curiosity very tedious.

And I am deeply suspicious of those who feel the need to set themselves up as defenders of the scientific faith.

But I have to say that I admire Ron Amundson. His analysis of the Hundredth Monkey Phenomenon is lucid, amusing and refreshingly free of the emotional dismissals that characterize much of the usual output of the Committee for the Scientific Investigation of Claims of the Paranormal.

Lyall Watson, the originator of the Hundredth Monkey story, is a hard man to track down. As I worked to locate him so that his voice could be heard in this issue of ***Whole Earth Review****, I became increasingly intrigued by what I learned secondhand of this mysterious and elusive character. Aside from authoring a series of best-selling books on the occult and the paranormal (****Supernatural, Lifetide, Gifts of Unknown Things****), he is also a former BBC television producer, an inveterate world traveler, the Seychelles representative to the International Whaling Commission (where he is an influential campaigner against commercial whaling), and the author of the definitive* ***Sea Guide to Whales of the World****, a book based on his ten years of cetacean study aboard the research vessel MS* ***Lindblad Explorer****. He holds degrees in anthropology, ethology, and marine biology. His newest book is* ***Heaven's Breath: A Natural History of the Wind****. Clearly, Lyall Watson is not your typical occult theory-monger.*

Needless to say, I finally got hold of Lyall Watson, and found him quite happy to respond to Amundson's analysis of his monkey tale. As he put it, "I enjoyed Amundson's argument and I have tried to reply in similar good humor."

—Ted Schultz

I accept Amundson's analysis of the origin and evolution of the Hundredth Monkey without reservation. It is a metaphor of my own making, based — as he rightly suggests — on very slim evidence and a great deal of hearsay. I have never pretended otherwise.

I take issue, however, with his conclusion that, therefore, the Hundredth Monkey Phenomenon cannot exist.

It might have come to be called the Hundredth Cockroach or Hairy Nosed Wombat Phenomenon if my travels had taken me in a different direction. As it happened, I was already interested in the nonlinear manner in which ideas and fashions travel through our culture, and the notion of quantum leaps in consciousness (a sort of punctuated equilibrium of the mind) was taking shape in my own mind when I arrived in Japan. It was off-the-record conversations with those familiar with the potato-washing work that led me to choose a monkey as the vehicle for my metaphor. And I still contend that there is more to those studies than meets the eye or reaches Hawaii in scientific journals.

I based none of my conclusions on the five sources Amundson uses to refute me. I was careful to describe the evidence for the phenomenon as strictly anecdotal and included citations in *Lifetide*, not to validate anything, but in accordance with my usual practice of providing tools, of giving access to useful background information.

I freely acknowledge a tendency to get excited by ideas, sometimes without good and sufficient reason, but I remain convinced that there is something like the Hundredth Monkey Phenomenon in action in nature, even if it remains unproven on Koshima. There seem to me to be mechanisms in evolution other than those governed by traditional natural selection, and a growing need to identify and describe such processes. The Hundredth Monkey is my way of drawing attention to the possibility of critical mass in social behaviour and of stimulating discussion about it. And Amundson is living proof that I have succeeded in doing so, even if he persists in criticising an idea on grounds that were never offered in its defence.

Amundson concludes that there can be no Hundredth Monkey Phenomenon. "Facts are facts," he says, hoisting the banner of epistemological realism over a collection carefully selected to prove his point. "The factual issue ends here."

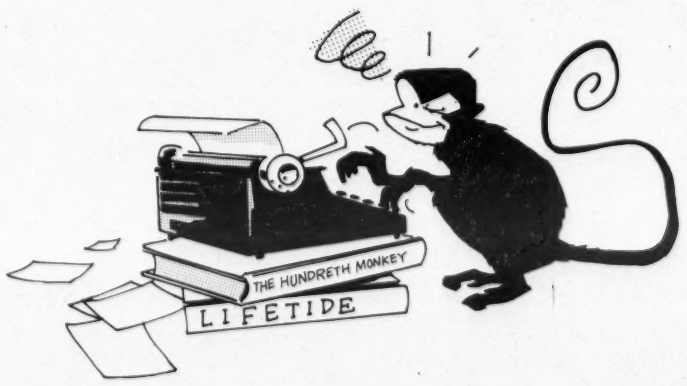
But does it?

Science, as Ron Amundson well knows, decides what is possible by reference to its definition of reality. Anything that fits the definition is acceptable. Anything that doesn't fit is impossible and must be rejected. And the problem here is that the concept of collective consciousness in any form stands in direct confrontation to the current definition. So the issue, when it ever reaches open debate, is reduced to a choice between rival facts. The normal versus the paranormal. Science versus what Amundson relishes in describing as pseudoscience. And of course, science always wins — even if it has to go through extraordinary contortions to do so.

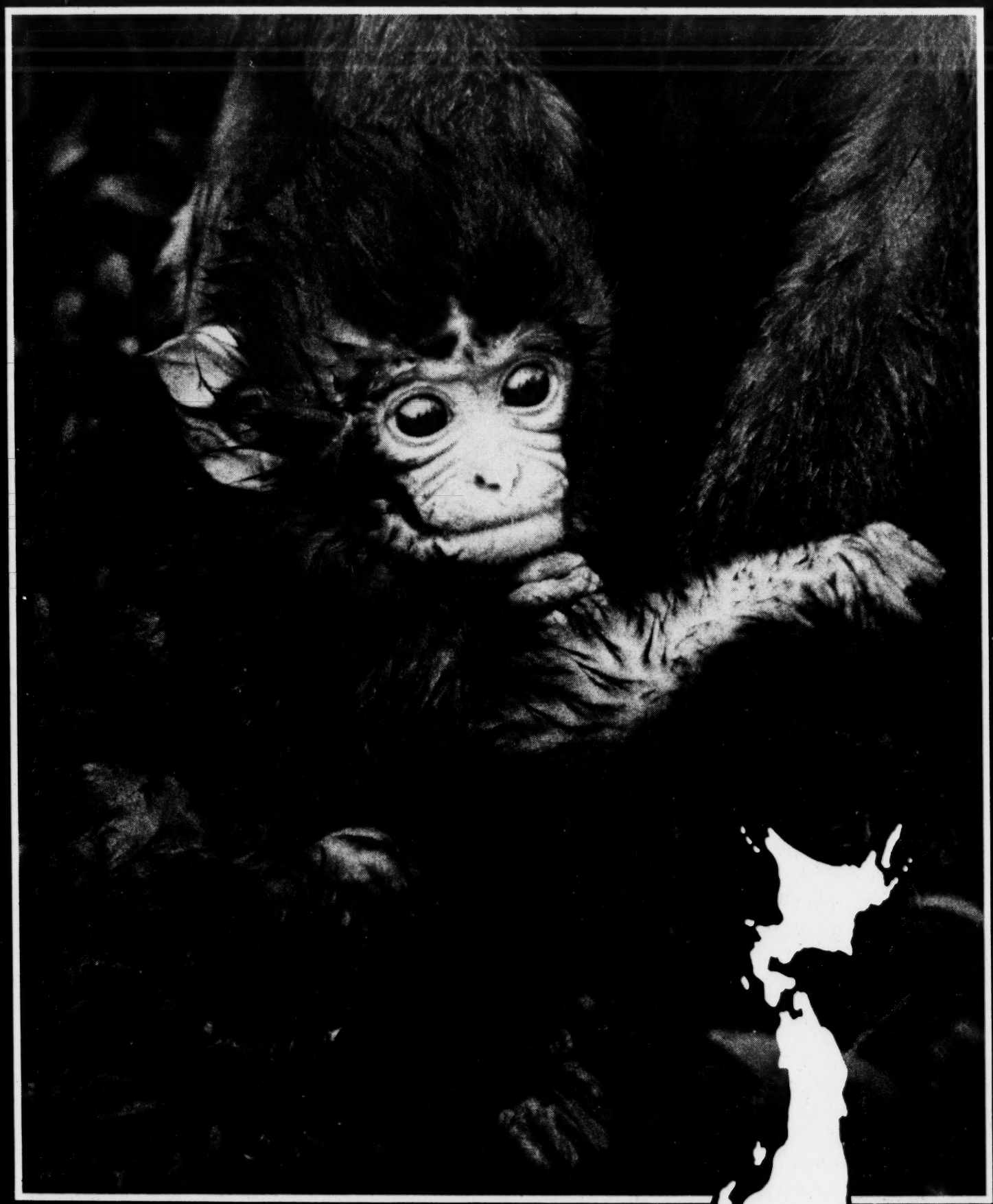
What is usually ignored in such discussion is the point that the scientific definition of reality is a theory, not a fact. We don't know exactly how things work. All we have is a reasonably good hypothesis. There is no need to force a choice between rival sets of facts. The debate concerns discordant information or ideas and their relationship to a theory of how things happen. All that is at stake is the validity of a working hypothesis. And all that is necessary to reconcile the new notion with the old theory is an admission that the theory might be incomplete — that information might be communicated other than through the accepted channels. There is no assault on the laws of nature or the principles of science, and no need for protectors of the scientific faith or charges of heresy.

The Hundredth Monkey Phenomenon is a plea for a broader definition of reality. One that includes the possibility of certain things happening when minds, perhaps even relatively simple ones, are involved. It is, and remains, an admission that being alive is being a part of something very much larger — a global ecology of mind in which even Japanese macaques are small, albeit well-washed, potatoes.

—Lyall Watson



The Misunderstood



Michio Nagamune

(Above) A baby Japanese macaque huddles close to its mother on a rainy day at the Arashiyama study site. (Right) The dots on this map of Japan indicate the locations of major primate study sites, where macaques are provisioned with food to facilitate observation.

Monkey

Primates, Potatoes, & Cultural Evolution

by Michael Huffman

THE STORY OF THE HUNDREDTH MONKEY originates from Lyall Watson's non-scientific interpretation of "potato washing," a cultural behavior discovered in the Japanese macaque monkey. There is nothing mysterious about what happened in the transmission of potato washing behavior among Japanese monkeys, despite what Watson leads people to believe in his book, *Lifetide*. On the other hand, much that may prove to be genuinely applicable to human cultural evolution has been learned from the study of Japanese macaques.

The true significance of potato washing is that it was the first evidence for the existence of culture in nonhuman primates. Rubbing off dirt or snow from roots and other soiled foods is common behavior among all Japanese monkeys and most other terrestrial primates. Such behavior is identical to potato washing, only without the water. The potatoes used in the early days of provisioning (from which the Hundredth Monkey story arises) usually came directly from the field and were still quite soiled when given to the monkeys. Before attempting to eat these potatoes, the monkeys brushed off the dirt. All it took was for some young, curious, and inventive individual to take the potato to water (perhaps initially only in play) to see that the dirt fell off easier when wet than when simply rubbed.

Koshima Island was an exceptional site for this because the troop of monkeys was provisioned on a beach with enough room for each to have access to the water while feeding, thus more chances to observe and imitate one another, and to apply what they had learned. The necessary condition of water in the feeding area was also present in study areas other than Koshima (see map), thus allowing the opportunity for other monkey populations to innovate potato washing. However, these sites were on mountain slopes and the sources of water (ponds and streams) near the feeding areas were considerably smaller than the beach at Koshima. This is one of the obvious reasons why the behavior never spread to many individuals in these other troops — the chances of potato handling occurring near a body of water were much less than at Koshima.

Watson appears to have been impressed by the fact that the potato washing behavior was observed in places geographically isolated from each other. But the occurrence of novel behaviors like food washing in populations completely isolated from each other has been repeated time and time again. In 1985, J. Scheurer and B. Thierry reported the food washing tradition of a group of Japanese monkeys in the Burgers' Zoo in Holland. The making of snowballs by young monkeys to use as play objects can be seen at Shiga-kogen in Nagano prefecture, and the same behavior was also reported by G. Eaton in 1972 for a group of Japanese monkeys at the Oregon Primate Research Institute. The Oregon troop was imported from a site outside Hiroshima.

In my own field research here in Japan, I came across (and reported in *The Journal of Human Evolution*) another example of this manipulation of objects for play, a behavior I call stone-play. This behavior has been observed at Arashiyama, Takasakiyama and Takagoyama (see map). Like potato washing, it has become a cultural behavior passed down from older to younger individuals as a form of tradition.

Until December 1979, monkeys were not seen to play with stones at Arashiyama. Apparently the behavior started at Takasakiyama in 1978 or 1979, as I first recorded the behavior there the same month I first saw it at Arashiyama, and the park employees responsible for feeding the monkeys at Takasakiyama said they had seen the behavior occasionally that year, but not much earlier. Stone carrying had been observed at Takagoyama in 1974 and reported by

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Though it would seem that telepathy had very little to do with it, the fact remains that the remarkable transmission of a learned behavior did *take place among certain groups of Japanese macaque monkeys in the 1950s. Here to describe what happened is Michael Huffman, a primatologist at the Laboratory of Human Evolution Studies at Kyoto University in Japan, where he studies cultural evolution in the same macaques that are the stars of the Hundredth Monkey story.*

—Ted Schultz

M. Hiraiwa in 1975. Members of the group of Japanese monkeys in Oregon have also been reported to carry stones.

At Arashiyama, the first individual I saw stone-playing was a three-year-old female named Glance-6476. By 1983, stone-play was a common behavior among the young monkeys of the group. The stones could be easily found around the feeding area. During this time 115 (49 percent) of 263 monkeys were seen to exhibit the behavior of stone-playing. Of these individuals, 80 percent were born between 1980 and 1983, after the behavior was first innovated. The remaining 20 percent were slightly older individuals that learned stone-play while they were younger, shortly after it had been innovated.

Among these were female relatives of Glance-6476 and their childhood playmates. Unlike other previously studied cultural behaviors, stone-play was never transmitted to adults. This is likely due to the fact that it is a play behavior, and adults are rarely seen to play.

Initially, the behavior was transmitted between young females of the same family and then on to playmates of the same age from other families. The speed of diffusion increased greatly when younger playmates, siblings, and one's own offspring began to acquire the behavior. The youngest monkeys I have seen play with stones at Arashiyama were 40 days old.

In the spring of 1984, I classified stone-play into a number of basic types of behavior: gathering, picking up, rolling in hands, clacking, carrying, and cuddling. Some behavioral types involve making noise by clacking stones together, rubbing them on top of larger stones, or scraping them on the tin roof of the research station. As long as the stimulus to perform the behavior is present, it will continue to be passed on from generation to generation through the normal process of imitation and social facilitation.

It is interesting to note that not only can the same behavior appear simultaneously in geographically isolated areas as a response to the same environmental stimuli, but the same behavior can reappear in the same group after having been lost. Stone-play is an example of this. Eiji Ohta, an educator and naturalist in Kyoto, was one of the first people to observe the troop of monkeys at Arashiyama before they were provisioned. At this time the monkeys were still hard to observe for long periods of time as they were not yet used to humans. In the troop's old range were several citrus trees of the species *Poncirus trifoliata*. The small four-centimeter-in-diameter fruit was not eaten by the monkeys, but on a few occasions, Ohta saw some monkeys collecting, carrying, and scattering about the fruits as they now do with stones. After the troop was successfully provisioned, their range shifted and they no longer frequented the area containing these trees. Prior to 1979, when stone-play was first observed, such play behavior had not been reported.

A stone-playing mother takes time out to groom her three-week-old infant. Though very young, the infant is already showing an interest in her mother's stone-playing activities.

Michael Huffman

Primate "Feelings"

The word "humane" has for some reason been set aside to define the so-called "human" qualities of compassion and sympathy for others. But observation of Japanese monkeys suggests that humans have no monopoly on these "higher" emotions.

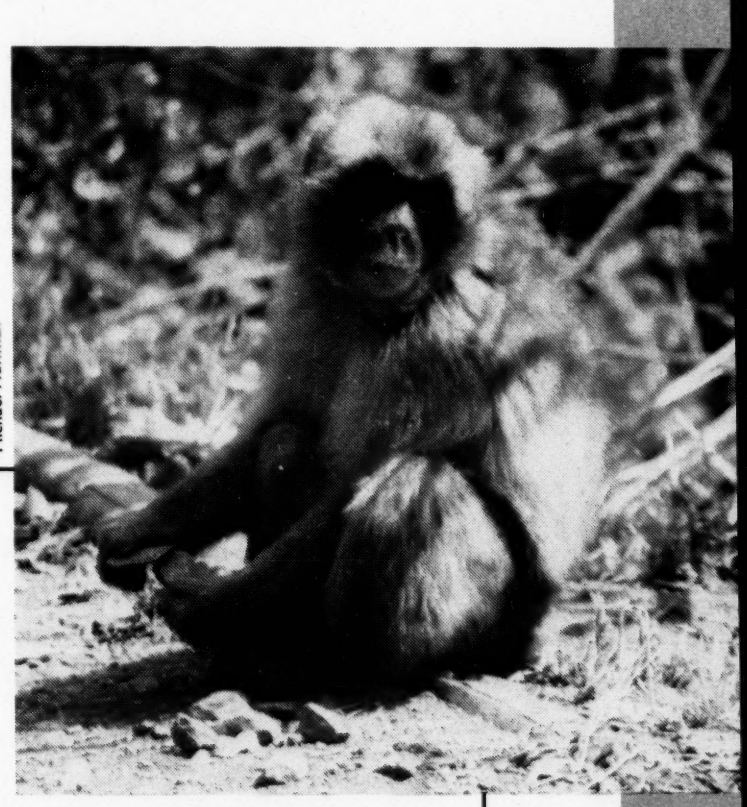
According to Dr. Naoki Koyama, in 1964, Biriken, a male of unknown origin, was the fifth-ranking leader-class male of the Arashiyama troop. In August of that year a female named Shiro died, leaving behind a three-month-old infant named Shiro-64. Biriken, a close companion of Shiro, was the first individual to pick up the little orphan, holding and carrying her close to his chest. Biriken's nipples were often red and swollen from the infant trying to nurse. When the troop fissioned in 1966, Biriken moved into A troop. The then two-year-old Shiro-64 remained with her grandmother and sisters for a while, but a month later moved permanently into A troop with Biriken. He later became the dominant male by seniority, while Shiro-64 also rose in rank through her association with Biriken. The relation between these two remained close and mating was never observed between them.

It was a snowy day in February of 1976 when Dr. Koyama discovered the then two-year-old male Copper-6573 lying motionless on the ground underneath a tall pine tree. Part of his scalp was cut open, with blood and white brain-like matter on the

When I first visited Koshima in 1979, potato washing appeared to be dying out, as chances for the young to observe and imitate the behavior were few, and the potatoes were no longer as dirty as they were, apparently, in the early days. Since 1972, provisioning at Koshima has been gradually discontinued, occurring only occasionally during the summer months. Potatoes are frequently replaced by wheat and soy beans.

What is the possible significance of such phenomena? Stone-play and potato washing are similar in that they both originate from behavior already present in the behavioral repertoire of the monkeys as a species. That is, monkeys have the propensity to brush off and manipulate objects. While potato washing had an immediate practical application (i.e., to clean off dirt), stone-play appears to be a means to no end. Or is it? Dr. Duane Quiatt, of the University of Colorado, and I think this may be of significance in understanding the evolution of stone tool use. Environmental opportunity brought about the right circumstances for potato washing to emerge and then to fade away. Stone-play in its present state is at most a form of play behavior. In its earlier form, the behavior was performed in the forest with soft fruits. Now, with stones in a new setting, the behavior has reappeared and spread. As the monkeys become more familiar with stone and its properties, the chances for it to be used as some form of tool increase. We propose that stone-tool use depends on a foundation of free, noninstrumental manipulation of stones. That is, play with stones is a prerequisite for stone-tool use. Through the mechanisms of innovation, diffusion, and tradition, the use of stone as a tool becomes possible. *We are not implying that these monkeys will start making stone tools.* We simply suggest that this model can provide an approach to understanding the selective events we must keep in mind when considering the evolution of stone-tool use and stone-tool manufacture when applied to early hominids, or even chimpanzees.

Since the behavior first started at Arashiyama, six years have passed, and stone-play is still quite popular. With each birth season comes a new group of "stone-play initiates," and the behavioral repertoire of stone-play has increased. With approximately 20 variations on the old behaviors, the creative and playful young monkeys are continuously experimenting with the properties of stone. To date I have seen stone-play remotely resemble tool use only once, and that may not have been intentional. The shell of an acorn was partially removed after rubbing it together with a stone, and the nut inside was then eaten. Let us hope the monkeys continue their progress in stone-play toward peaceful purposes only! ■



A juvenile skillfully clacking together two stones selected from a pile he has gathered along the trail.

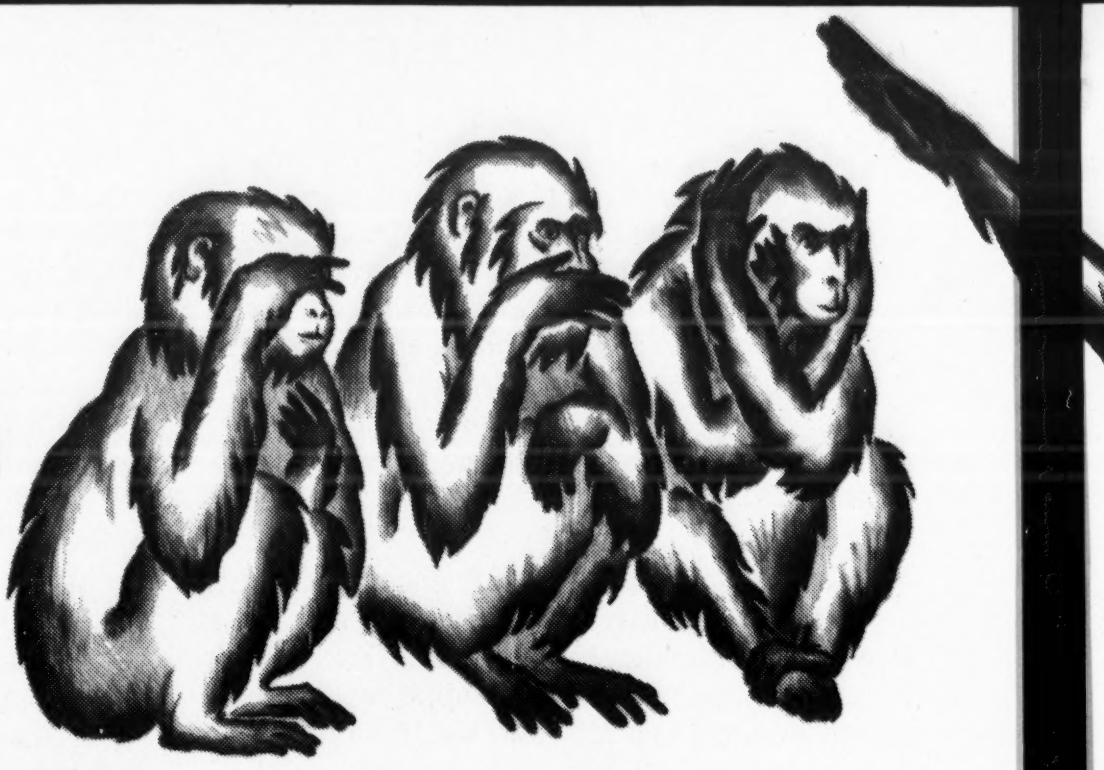
Michael Huffman

wound. He had apparently been attacked by a large bird of prey. Sitting at his side was Deko-64, another male of the troop. He threatened Koyama away whenever he came too close. In the evening when the troop returned to the forest, the injured Copper-6573 was left behind by his mother and older sister who quickly left with the rest of the group. He was unable to walk on all fours, but crawled on his forearms, all the time keeping his head erect. Deko-64 walked along with him into the forest. Day after day, the two remained together, until the little monkey's wound eventually healed. Deko-64 and Copper-6573 are now the third- and sixth-ranking males of the troop. Copper-6573 can easily be identified by the large bald spot that remains above his left eye.

On the evening of June 10, 1980, I slept up on the mountain as I frequently did, working late into the night on my field notes. Outside, in front of the research station, quietly sat 70-year-old (20 actual years × 3.5 = 70 monkey years) Shiro-60. She had recently become very weak and had a hard time keeping up with the rest of the troop when they returned to the forest in the evening. This night she decided not to try to make the 30-minute walk back to the sleeping site. For the following three days she remained near the feeding site with her perfectly healthy daughter, Shiro-6078, close by during the daytime. On the morning of the 14th, neither of them came into the feeding area. They were never seen again. Monkeys frequently move off into the forest alone before they die. Though impossible to verify because their remains could not be found, mother and daughter may have died together, perhaps attacked by one of the packs of feral dogs that roam the mountains.

—Michael Huffman

Of Myths & Monkeys



A CRITICAL LOOK AT CRITICAL MASS

by Maureen O'Hara

Illustrated by Kathleen O'Neill

THE HUNDREDTH MONKEY provides us with a case study through which to examine the deterioration in the quality of thought and scholarship among those people who participate in what has become known as the "New Age" or "human potential" community. I believe that this deterioration may ultimately result (if it has not already) in discrediting humanistic science altogether, leaving us with nothing more than faddism and a rag-bag of pseudoreligious and pseudoscientific superstition. Because I believe that a humanistic view of persons and their communities has never been more necessary in order to counterbalance the galloping alienation in human life, I view this trend toward supersition with real alarm.

Lyall Watson does not tell us the monkey tale in his book *Lifetide* because he is interested in studies of behavior propagation in macaques — he is merely using the story to support his conviction about human consciousness, that when a certain "critical mass" of people believe in something, suddenly the idea becomes true for everyone. There can be no doubt that ideas and attitudes can spread rapidly through a community from time to time. Evidence of this exists everywhere. Perhaps this monkey story and the rapidity with which it passed from pseudoscientific speculation, through dubious editing, word of mouth transmission by superstars in the human potential movement, into popular New-Age superstition, makes a far better case study of the very phenomenon that the monkey research putatively demonstrates.

Inspired in the 1960s by the works of Abraham Maslow, Carl Rogers, Gregory Bateson, and others, Maureen O'Hara cut short a career in biology and became a humanistic psychologist in order to participate in "the creation of a precise humanistic science" with the goal of "a humane global collective, composed of free, responsible, rational people capable of purposeful action, critical thought, creativity, and individual conscience." Today she is alarmed by the way her profession, intertwined as it is with the human potential and New Age communities, has embraced the trappings of pseudoscience and become prone to accept and amplify "bad myths," of which the Hundredth Monkey story is only one example. As a specialist in mass psychology and cross-cultural phenomena, she is particularly qualified to comment on the "critical mass" concept idealized in the Hundredth Monkey myth, and to provide us with an insider's view of the reasons behind the rise of superstition in humanistic science.

—Ted Schultz

This process is widely known and effectively manipulated by those wishing to influence large numbers of people. Hitler was terrifyingly successful in convincing an entire people (at least a critical mass) of the reasonableness of his "final solution." Teenage culture in our own country offers nonstop demonstration of new fads that emerge, spread through the group to become a critical mass, and disappear, all in a matter of weeks. Madison Avenue advertisers pay high salaries to those psychologists who become adept at manipulating the mass psyche to form critical mass, as do the Defense Department and politicians running for office. The means by which critical mass is achieved, however, is not in any way mysterious. It is a matter of telecommunications, not telepathy.

There are major contradictions in the present idealization of critical mass — seen not only in the Hundredth Monkey story, but in the ideologies of such organizations as est, Bhagwan Rajneesh, and the "Aquarian conspirators." In promoting the idea that, although our ideas are shared by only an enlightened few (for the time being), if we really believe them, in some magical way what we hold to be true becomes true for everyone, proponents of the critical mass ideal ignore the principles of both humanism and democratic open society. The basis for openness in our kind of society is the belief that, for good or ill, each of us holds his or her own beliefs as a responsible participant in a pluralistic culture. Are we really willing to give up on this ideal and promote instead a monolithic ideology in which what is true for a "critical mass" of people becomes true for *everyone*? The idea gives me the willies.

PSEUDOSCIENCE, SCIENCE, AND AMBIVALENCE

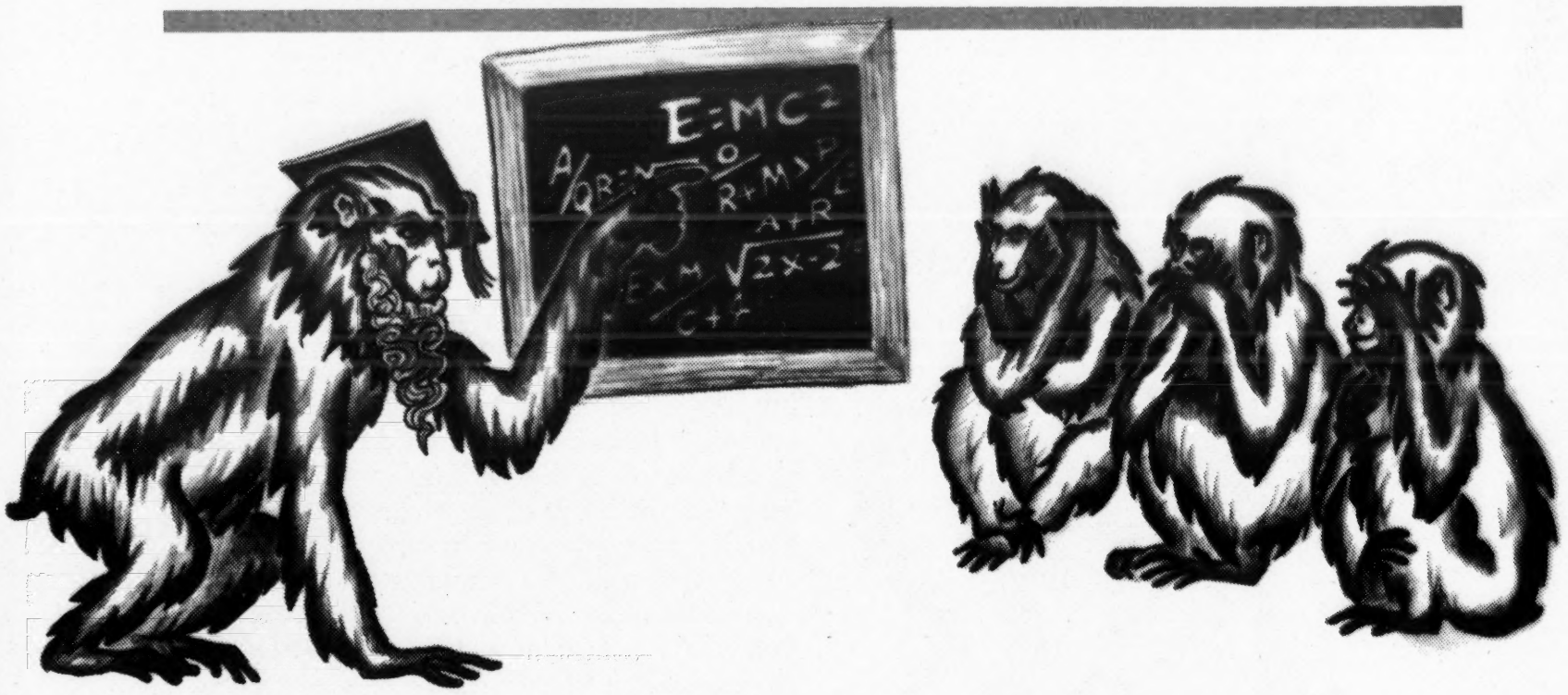
How could such a profoundly nonhumanistic idea become so popular among people who consider themselves the harbingers of a "New Age"? I think the answer lies, at least in part, in the renewed infatuation with science and its shadow, pseudoscience. In the past ten years or so, we have seen the image of nuclear physicists shift from Dr. Strangelove-like creators of the most terrifying death devices in history to their present status as darlings of the so-called "new paradigm" consciousness. When we saw the physicists as on "their side," we rejected everything they did. Now that they are on "our side," we quote them at breakfast. Books like Fritjof Capra's *The Tao of Physics* have the New Age community convinced that physics is just some kind of Taoism with numbers.

This new infatuation with science is a shallow one, easily swayed by tricks of the pseudoscience trade such as theorizing wildly in scientific-sounding language, sprinkling speculative discussion with isolated fragments of real data regardless of relevance, confusing analogy with homology, breaking conventional rules of evidence at will, and extrapolating from one level of reality into others wherein different principles operate.

I do not wish to imply that pseudoscience necessarily stems from a conscious effort to deceive. More often than not, crossing the line from science to pseudoscience comes from ignorance and inexperience, and the popularity of pseudoscience is with an audience equally ignorant and inexperienced. Because this audience is not equipped to evaluate claims of scientific validity, they instead accept them on faith.

One standard trick of the pseudoscience trade, for example, is to emphasize whatever affiliations to established science the writers have or had. It is to great advantage if the writer can be referred to as a scientist associated with a prestigious university with a wide reputation for scientific excellence. It matters not to the purveyors of pseudoscience whether or not the "scientists" referred to have been in a lab for years, or if, when they were, it was in a field even remotely relevant to the subject at hand.

An August 1981 *Brain/Mind Bulletin* account of the Hundredth Monkey story refers to Lyall Watson as a biologist: the monkey story follows. The bibliography of Watson's book contains not one reference to any scientific research, biological or otherwise, that he has published, yet his other books, on the occult, are listed. It is not difficult



to imagine a rather different response from the reader if *Brain/Mind Bulletin* had introduced the monkey story by referring to Watson as a writer on the occult.

Another example of "authority transfer" can be found in Tom Cooper's review of the film, *The Hundredth Monkey*, which appeared in the May 1983 issue of the *Association for Humanistic Psychology Newsletter.* In asserting that the Hundredth Monkey thesis is "substantiated" he says, "Rupert Sheldrake, the Cambridge scientist, reports that when one group of rats was taught . . . " The implication here is clear and misleading. The statement conveys the impression that Sheldrake (a) is currently on the faculty at Cambridge; (b) does scientific research there; (c) knows a lot about rats; (d) is "reporting" on his own research.

If we look at Sheldrake's own book, *A New Science of Life*, we find that he was once a scholar at a Cambridge College, and is described as currently a consultant at an international research institute in India. His research is on the physiology of tropical plants. Again, the impact would be very different if Cooper had written, "Rupert Sheldrake, tropical plant physiologist in an Indian crop research center, says that when one group of rats . . ." This kind of "credentialeering" is obviously intended to give credibility to scientific-sounding propositions. Such authority-borrowing works because institutions such as Cambridge University and disciplines such as biology have, despite occasional, widely publicized aberrations, lived up to their reputations for reliability.

Another characteristic of pseudoscience is its profound ambivalence toward the scientific establishment. Despite his identification as a biologist, Watson's work carries within it clear evidence of his ambivalence. On one hand, he uses research findings to try to support his conviction about critical mass theory in human events. On the other hand, he suggests that the scientific community is less than honest when he tells us that these same researchers were reluctant to publish what they suspected was the truth. He panders to the popular distrust of science by suggesting that this reluctance was due to fear of ridicule by, one assumes, the scientific community.

Those who engage in pseudoscience want it both ways. They want the authority of science but are unwilling to abide by the rules by which the scientific community earned its authority in the first place. Pseudoscientists and their publishers may actually use criticism of their ideas by the scientific community as evidence that they are important because they are controversial. They seem to reason that because Einstein was controversial, anyone who is controversial must be an Einstein. On the jacket of the U.S. paperback edition of Sheldrake's *A New Science of Life* is the proud claim that the British scientific journal *Nature* had suggested that the book was "the best candidate for burning there has been for many years." As the designers of trade-book jackets are well aware, such outbursts by the scientific establishment only enhance a work's attractiveness to a generation of lay people fed up with the excesses of "more orthodox than thou" attitudes of the scientific establishment.

This ambivalence toward establishment science strikes an immediate and comforting chord in the minds of a public that is not only ambivalent about science, but largely ignorant. It is difficult for the uninitiated to distinguish between good science, bad science, and pseudoscience. Appraisal becomes especially difficult when isolated pieces of scientific knowledge are abstracted from their contexts within the broad, interwoven fabric of scientific thought. It is context that makes knowledge out of data. This is true not only for sciences, but for all areas of advanced knowledge such as

Pseudoscientists want the authority of science but are unwilling to abide by the rules by which the scientific community earned its authority in the first place.

art, zen, medicine, psychotherapy, and so on. This makes a book like Capra's *Tao of Physics* almost impossible to evaluate adequately. Those adept at physics don't understand orientalism; those well versed in Taoist philosophy can say little about the physics. The people who swallow Capra's speculations usually can critique neither. If they like what they read, they accept it as fact.

One concrete consequence of this ubiquitous ambivalence toward science can be seen in the rejection of training in science and logical thinking by some would-be humanistic psychologists and other aspiring agents of change. Without such training these people, regardless of their heart-felt commitment to transformation, have practically no basis on which to evaluate claims made in the name of science. Anyone — crackpot, charlatan, genius, or sage — must be dealt with in the same way (believed or disbelieved) solely on the basis of personal opinion. Personal opinion then becomes equated with knowledge and can be asserted without embarrassment.

The result is that the human potential movement has come dangerously close to creating the conditions for the establishment of yet another orthodoxy resting on unproved articles of faith and taken-for-granted definitions, axioms, and concepts. Humanistic science loses ground each time it hands over authority to pseudoscientists and speculative myth builders.

GOOD MYTHS AND BAD MYTHS

On two occasions (both gatherings of humanistic psychologists) when the monkey story was told, I tried to raise some of the issues raised here. When I suggested that the Hundredth Monkey story lay in the realm of mythic thought, not scientific, the response was the same; the speakers were unimpressed. "Myths are as true as science," was the response. "It's a metaphor" was another. P.B. Walsh's comment in the November 1983 *Association for Humanistic Psychology Newsletter* was characteristic: "Science or myth, the Hundredth Monkey is a metaphor that exactly fits . . ." and, later, "As metaphor it speaks to our empowerment."

As to the assertion that myths are as true as science, I take the point. But there is more that has to be said, for although they might both be "true," they are not true in the same way. These respondents either do not know this or do not think it matters much. But, of course, it matters a great deal and I believe that it is urgent that we learn to recognize the difference. Casually interchanging myth, science, and metaphor robs each of these realms of its unique power to deepen our understanding of the world, to orient our science, and to inform our actions. Women and ethnic minorities well know the consequences of wrapping a myth together with science. It is especially pernicious, as any Nazi holocaust survivor can confirm, when a bad myth is wrapped up with bad science.

My objection to the Hundredth Monkey Phenomenon, then, is not that it is myth, but that it is bad myth, and that it draws its force not from the collective imagination, but by masquerading as science. It leads us (as I have tried to show) in the direction of propaganda, manipulation, totalitarianism, and a worldview dominated by the powerful and persuasive — in other words, business as usual.

Perhaps the best use for this myth has already been found by the publishers of the *New Age Journal*. After giving me in their mass mailing a streamlined and even more anthropomorphized version of the monkey story, after flattering me with the thought that I am a person with a more advanced consciousness, after telling me that "test after test" by "behavioral scientists" has shown "conclusively that when a critical number of learners reach a new awareness, this new awareness may be spontaneously communicated from mind to mind," they tell me that now is the time to get a good deal on their magazine. So sure of their ground are they, they conclude, "There's no doubt about it. (I am their) Hundredth Monkey."

When I was first drawn into humanistic science, I was well aware that I was attracted to its myth. I knew of very little actual "data" that could support a belief in the possibility of a humane global collective, composed of free, responsible, rational people capable of purposeful action, critical thought, creativitiy, and individual conscience. Of course I knew this to be an idealized myth standing in sharp contrast to the indignities that are the actual daily experience of all but a privileged few. Even so, I think it is a good myth and has the psychological power to mobilize us and to orient our search for knowledge about ourselves. ►

Casually interchanging myth, science, and metaphor robs each of these realms of its unique power to deepen our understanding of the world.

Over the past 15 years, this myth has guided my studies and those of my colleagues (and at times has required acts of faith as great as any religion would demand) as we have tried to discover, as all science does, if this mythic possible world could, in fact, be an actual world; and if not, why not? So far we have discovered little that, in my judgment, gives much grounds for the current New Age optimism that the transformation is just around the corner. It is a testimony to the sustaining power of the humanistic myth that we did not give up our research long ago and open a restaurant.

In contrast, I most emphatically cannot agree that the "Hundredth Monkey myth empowers." In fact, I believe it to be a betrayal of the whole idea of human empowerment. In this myth the individual as a responsible agent disappears; what empowers is no longer the moral force of one's beliefs, not their empirical status, rather, it is the number of people who share them. Once the magic number is reached curiosity, science, art, criticism, doubt and all other such activities subversive of the common consensus become unnecessary or even worse. Individuals no longer have any obligation to develop their own worldview within such a collective — it will come to them ready-made from those around. Nor are we called on to develop our arguments and articulate them for, by magic, those around us will catch them anyway. This is not a transformational myth impelling us toward the fullest development of our capacities, but one that reduces us instead to quite literally nothing more than a mindless herd at the mercy of the "Great Communicators." The myth of the Hundredth Monkey Phenomenon is more chillingly Orwellian than Aquarian. ■

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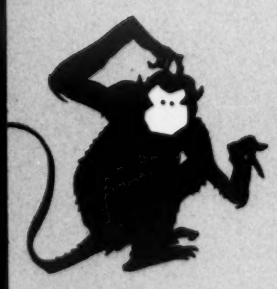

Anomalistic Psychology

Faith-healing, firewalking, past-life recall, trance-mediumship ("channeling"), dowsing, glossolalia (speaking in tongues): more paranormal claims fall to the province of psychologists than to any other science, yet there is a distinct lack of resource material that describes and assesses these claims in a scientific manner. In fact, from the popular literature one could easily get the idea that all psychologists are mystics and parapsychologists. ***Anomalistic Psychology****, designed as a college textbook by two psychologists, corrects this problem. The authors survey the relevant research for each of a wide range of psychological anomalies and, by putting it in context, frequently dispel the aura of mystery perceived by those of us unschooled in behavioral science. For instance, we learn that the seemingly miraculous can sometimes be explained by uncommon abilities of mind and perception. Glossolalia can be related to well-known patterns of speech invention in children and to echolalia in brain-damaged individuals. Cases of telepathy can be explained by known mechanisms of the extraordinary detection of faint stimuli. "Past-life" memories may be attributed to cryptomnesia. But the authors never adopt a "debunking" tone. Genuine mysteries are not denied, and possibilities are not downplayed. The authors' attitude is that, however inexplicable, any phenomenon is accessible by the scientific method.*

The result is fascinating reading. The genuine psychological phenomena described here are at least as wonderful as the paranormal phenomena they explain.

—Ted Schultz

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Price (1936) thought that fire walking could be explained by the short contact time between foot and embers, the low heat conductivity of wood embers, and confidence and steadiness in walking. He discounted or minimized the role of some of the other factors already discussed, such as the chemical preparation of the feet, the spheroidal state, or the need for special preparations.

One of the factors that is not stressed in reports on fire walking is that fire walking is walking, not standing still on embers or stones. There is no recorded instance of anyone's ever having attempted to just stand on red-hot stones or glowing embers for any length of time. The walkers walk rapidly, and it may take them only five or six steps to traverse a 20-foot long trench, for instance. As anyone who has felt the temptation to challenge the flame of a lit candle knows, it is possible to pass one's finger through the flame repeatedly and not get burned, provided one does not linger too long in the flame. It takes a couple of seconds for the skin temperature to reach the point where damage will begin to occur. Rapid walking through the embers, moving one's feet so that no one point is in contact with the embers for more than just a fraction of a second, should not allow the skin temperature to rise enough for burns to occur, even after several steps have been taken. Whatever heat accumulates from the four to six steps taken is dissipated on the cool grass or loose earth around the pit before the walker takes another walk.

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The "true" medium is one who dissociates readily. Proneness to dissociation, repeated practice, and the expectant and supportive atmosphere of the seance room combine to make the medium's performance what it is: a smooth and reliable passage into the trance state and the impressive welling up of autonomous portions of her divided consciousness that are taken as the manifestations of the spirits of the dead.

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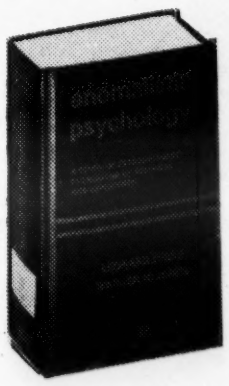
In 1903, Professor R. Blondlot, head of the physics department of the University of Nancy, in France, announced the discovery of a new and amazing form of radiation, which he named N-rays. Blondlot reported that N-rays were emitted naturally by several different metals, but never by wood, and that they were faintly visible to the naked eye in a darkened room. Soon, other investigators, particularly in France, were replicating and extending Professor Blondlot's findings. Many other substances giving off N-rays were added to the list (e.g., human tissue, plants, and even a human corpse), but, again, never wood. The prestigious French Academy of Sciences published almost 100 papers on the topic within a year of Blondlot's original discovery, and it announced the decision to award Blondlot a medal and a cash prize for his accomplishment.

However, researchers outside of France were generally unable to replicate Blondlot's findings. Eventually, R. W. Wood, a scientist working in Great Britain, visited Blondlot in his laboratory at Nancy to observe directly the now famous N-rays. But, still unable to detect N-rays even in Blondlot's lab with Blondlot himself conducting the demonstrations, Wood decided that N-rays might be more imaginary than real. Wood proved this by surreptitiously altering some of Blondlot's apparatus. For example, he substituted a wooden roller for a metal file that Blondlot was using as the source of N-rays. When Blondlot reported that he could still see the N-rays, Wood had evidence that N-rays were non-existent because all investigators had reported that wooden objects did not produce N-rays. Several other tests also suggested self-delusion. When Wood's findings and conclusions were reported to the scientific community, the phenomenon of N-rays passed into the history of pseudoscience.

Commentators have generally agreed that the phenomenon of N-rays was not a hoax of the usual sort. Apparently, Blondlot was sincere in his beliefs. He certainly was a qualified scientist in terms of training and expertise. What the saga of N-rays does sadly illustrate is the powerful influence that wishes and extrinsic motivation can have on judgments and reasoning. Blondlot's folly occurred at a time when other strange forms of radiation, such as X-rays, were being discovered. It is likely that Blondlot deluded himself (as did many others) because of the strong desire to participate in the exciting advancements in science being made at that time.

A case of *pareidolia*, projected misperception. Mrs. Maria Rubio and her tortilla image of Jesus.



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365 Broadway
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The Blind

Every System of Knowledge Is

by Ron Westrum
Illustrated by Harry S. Robins

For most of recorded history, mankind has been fascinated by *anomalies*, a term that comes from the Greek *a-nomos*, meaning "contrary to rule or law." For us, an anomaly is something in apparent contradiction to scientific law, but this scientific frame of reference is the relatively recent development of the last few centuries. For our ancestors, science was not the key issue.

For the ancients, an anomalous event was a sign or a portent, a miracle, a message from the gods, something not so much interesting in itself but in what it meant for the future, what it *portended*. The word "monster" is derived from the Latin *monstrum*, a portent or warning. Since such warnings from the gods had political implications, the state often insisted on a monopoly on their interpretation. In fact, the Romans had a regular system for the interpretation of "prodigies" to make sure their meaning would come out to the benefit of the state. State and religious powers were supported by conservative interpretations of strange events. As Shakespeare wrote in *Julius Caesar:*

> When beggars die, there are no comets seen
> The heavens themselves blaze forth the death of princes.

There were always skeptics such as Epicurus, who doubted the gods were behind such natural phenomena, and who encouraged people not to be frightened by them. Yet the political value of anomalies, as well as

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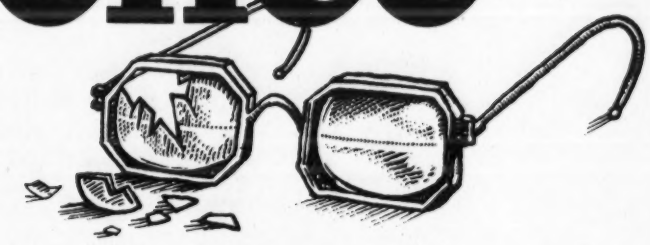
We have seen in the case of the Hundredth Monkey an example of a pseudoscientific notion examined by science and found to be false. What about the reverse of this situation: an anomalistic claim ignored by science that later turns out to be true? As a sociologist and associate director of the Center for Scientific Anomalies Research at Eastern Michigan University, Ron Westrum has devoted much of his professional life to the study of science's blind side.

—Ted Schultz

Eye of Science

Also a System of Ignorance



general popular superstition, kept them mysterious and awesome.

This attitude began to change with the advent of modern science in the 17th century, although the age of reason diffused only slowly to the common people. The motto of the Royal Society of London, founded 1660, was *nullius in verba*, which can be loosely translated as "take nothing on faith." The new scientific philosophy insisted on proof through experiment and investigation, and many of the superstitions of earlier times fell before its onslaught. Signs, wonders, miracles, and portents now were all to be resolved into natural phenomena explainable by natural causes. Furthermore, these natural causes were to be organized within theories of increasing scope.

Every system of knowledge, however, is also a system of ignorance. A great many phenomena did not fit into the newly constructed comprehensive theories, and since these phenomena did not make sense in terms of what was known, they were simply excluded. Signs and wonders had been anomalies because they had departed from the common run of experience. The new meaning of anomaly was something outside the pale of science. As one would expect, the more inaccessible to observation something was, the more it tended to be considered an anomaly. When, in spite of the strictures of the scientific community, people insisted on reporting experiences of anomalous events, science developed a series of strategies for dealing with them.

A Phenomenon Physically Impossible

One such strategy was ridicule. In the 18th century, there were a great number of reports of stones falling from the sky. Few people connected such objects, often referred to as "thunderstones," to the fiery meteors that occasionally lit up the heavens. From time to time, scientists investigated the thunderstone reports with varying results. For the most part, if they felt there was anything to the reports, they kept silent. In 1755, for instance, the abbe Domenico Tata became the possessor of a meteorite specimen that five Calabrian shepherds had seen fall. He wrote:

> Since that time, the Prince of San Severo, and the Marquis Mauri, have often tried to persuade me to publish all the details, but other friends dissuaded me. They warned me that the savants and the half-savants (even more to be feared) would attack me on this subject or pretend to be gracious to me while treating me with incredulity. These reasons decided me in favor of silence.

In 1772, a committee of the French Academy of Sciences was able to report that the two specimens of "thunderstones" they examined had no special features indicating an extraordinary origin. The committee, which included the great chemist Antoine Lavoisier, further remarked that "true physicists" had always been skeptical of such reports and saw no reason to change its mind in the current instance. Other savants dealing with these reports suggested that falling stones might be the results of bad observers or bad observations. Museums threw away their precious meteorite specimens.

The skepticism climaxed in 1790, when an area in the southwest of France was virtually inundated by falling stones. On the night of July 24, a huge fireball blazed over the southern skies and exploded over the parishes of Creon and Juillac. Stones rained down everywhere, to the consternation of the peasants who fortunately escaped injury. But the stones knocked branches off trees and shattered roof tiles. Some of the stones ("black as a truffle") weighed twenty pounds.

In the nearby town of Agen, a local professor named St. Amand heard about the strange fall. He could not believe the fall had occurred, but he thought it would be amusing to ask the locals to certify that it had indeed taken place. He wrote to the village and was stunned to receive in return not only a legal protocol signed by the mayor and the village attorney but also a sample of the stones. The affidavit indicated that some 300 people

were willing to support the facts in question. Far from convincing St. Amand, the affidavit dismayed him. He sent it to another physicist, Pierre Bertholon, who published it with the following comment:

> If the readers have already had occasion to deplore the error of some individuals, how much more will they be appalled today seeing a whole municipality attest to, consecrate, but a legal protocol in good form, these same popular rumors, which can only excite the pity, not only of physicists, but of all reasonable people . . . . What can we add here to such an affidavit? All the reflections which it suggests will present themselves to the philosophical reader in reading this authentic illustration of an obviously wrong fact, of a phenomenon *physically* impossible.

Others, however, began to take a different view. In 1794, the physicist Ernst Chladni published a daring book that suggested falling stones were dropped by the "fiery meteors" whose nature no one had yet explained. Others, such as English chemist Edward Howard, used the new chemistry of Lavoisier to show that meteorites were indeed not ordinary rocks. In 1803, a meteorite shower 70 miles from Paris created such a stir that it was investigated by the eminent physicist Jean-Baptiste Biot, who showed that there was no doubt the stones had fallen.

This ended most of the incredulity in Europe. But when a meteorite fell at Weston, Connecicut, in 1807, President Thomas Jefferson was not disposed to believe it was real. Pressed by an acquaintance as to his opinion, he said he could sum it up in five words: "It is all a lie." A month later, he expressed a somewhat more moderate opinion in a letter to Daniel Salmon, and suggested that the matter might be looked into by the American Philosophical Society. His initial reaction, however, is perfectly understandable. And for many scientists, it is the more enduring attitude.

The Self-Constructed Model

In 1819, Ernst Chladni reflected back on his struggles for the recognition of meteorites. While the Enlightenment, the 18th century intellectual movement that examined accepted doctrines of the time, had brought certain benefits, he felt it also brought with it certain intellectual problems. Now scientists "thought it necessary to throw away or reject as error anything that did not conform to a self-constructed model." The very success of scientific experiment and theory had led to a misplaced confidence that *what was real was already within the circle of science.* What was outside, therefore, what did not conform to scientists' theories, could be dismissed by invoking scientific authority and by ignoring or ridiculing observations not supported by it.

More recently, in 1979, the medical researcher Ludwik Fleck noted in his book *The Genesis and Development of a Scientific Fact* a very similar trend. He wrote:

> What we are faced with here is not so much simple passivity or mistrust of new ideas as an active approach which can be divided into several stages.
> (1) A contradiction to the system appears unthinkable.
> (2) What does not fit into the system remains unseen;
> (3) alternatively, if it is noticed, either it is kept secret, or
> (4) laborious efforts are made to explain an exception in terms that do not contradict the system.
> (5) Despite the legitimate claims of contradictory views, one tends to see, describe, or even illustrate those circumstances which corroborate current views and thereby give them substance.

What does not fit the theory is thus excluded. The anomalous event is forced outside the official circle of consciousness into a kind of outlaw existence.

This happened with the unusual luminous phenomenon known as "ball lightning." This form of lightning appears as a luminous ball, usually smaller than a basketball, and is quite short-lived (usually less than a minute). It has a long history of observation, but for many decades was an outlaw event in meteorology. In the 1930s, W. J. Humphreys,

an influential official in the U. S. Weather Bureau, had argued persuasively that ball lightning was probably an optical illusion. There was subsequently little mention of ball lightning in meteorology textbooks, and persons with scientific training who observed ball lightning generally kept quiet about it. When commented upon, it was described as a rare event. One of the reasons that it appeared to be a rare event is shown in anecdotes like the following, which appeared in *The Lightning Book* by Peter Viemeister:

> During the summer of 1937 several technical observers on duty at 500 Fifth Avenue, during the Empire State Building lightning program, saw what might be interpreted as ball lightning, not once but four times. One of the engineers, now the chief technical executive of a large power company, saw a bluish luminescence slowly descend the 38-foot tower of the Empire State Building after four of the ten or eleven strokes that hit the tower that evening. Fearing that his colleagues would regard him as a lightning-ball "quack," he was hesitant to speak about what he had seen, but decided to mention it anyway. Surprisingly several of the others admitted seeing the same things. These observations were omitted from the technical reports since they did not appear on the recording cameras nor on the oscillograph records.

Thus, because there is no *spontaneous reporting* of the anomalous event, scientists may assume that there is no event to be reported. That this might be a self-fulfilling prophecy is hardly considered. Part of the problem, of course, is that no one is *asked* whether they have seen an unclassified phenomenon. When surveys of technical personnel regarding ball lightning *were* done in 1966 at two national laboratories, many meteorologists were surprised to discover that four percent of the potential observers in one laboratory had seen it. This hardly qualifies as a rare event!

The problem with ball lightning is that no one has yet found a satisfactory theory to explain it. It is tempting for physicists to argue, as some in fact have, that since it can't be explained, it probably doesn't exist! (I.e., if it doesn't fit the self-constructed model, it's not real.) So thousands of ball lightning sightings were ruled inadmissible and ignored. In the last decade or so, a much more positive attitude has prevailed, but the phenomenon is still far from completely accepted.

A similar thing happened with "meteor noise." When meteors pass through the atmosphere or explode, they often cause powerful sonic booms, as one would expect.

It is tempting for physicists to argue that since ball lightning can't be explained, it probably doesn't exist!

But some observers, say 20 percent of people who have seen meteors, also report that the meteor made a swishing, crackling, or hissing noise while in flight. Since the meteors are often tens of miles away, these reports seem implausible, since sound only travels about a thousand feet per second. Yet there have been cases in which individuals have first *heard* the meteor and then have gone outside to see it, and many others from credible people which relate the sound heard simultaneously with the meteor observation. Such experiences, because they seemed implausible, were simply dismissed by some meteoriticists. One researcher even suggested there was an inverse correlation between the observer's education and his willingness to make such reports. More recent studies suggest, however, that meteors produce very low frequency (VLF) radiation. Some people (not all) perceive VLF radiation as sound, either because of its direct effects on the brain or because it causes acoustic effects in objects near the observer. Now that an explanation has been found, physicists are more willing to take such anomalous sounds seriously. ►

The Hidden Event

Study of the social processes of science at work in these examples leads us to the following discovery: If what is contrary to theory is rejected, it is not likely to be reported. If it is not reported, its existence may not even be suspected. Therefore, in some situations, *the anomaly may be a hidden event*, one almost invisible to the society at large. An example of such a hidden event is the battered child syndrome, whose prevalence was virtually unsuspected until the 1950s.

In the 1930s, a radiologist named John Caffey began to suspect that the x-ray films he was handling contained evidence of child abuse. Caffey was later to become one of the founders of pediatric radiology, and his manual *Pediatric X-Ray Diagnosis* (now in its 7th edition) is still the standard reference. As time went on, Caffey's suspicions grew, and in 1946 he published an article entitled "Fractures in the Long Bones of Children with Chronic Subdural Hematoma." This was the first modern article on what would later be called the battered child, but its title and its contents gave only a hint of Caffey's true thoughts. Off the record, he was much more specific, and his two residents Betram Girdany and Frederick Silverman were strongly imbued with Caffey's idea of "multiple unsuspected traumata." In the early 1950s, Silverman and other radiologists began to publish articles in medical journals that were much more direct. Children were being injured, x-rays could detect these injuries, and often the injuries were inflicted by the child's caretakers. But there was little interest in child abuse by the medical community or among the general public.

One of the problems with admitting child abuse as a reality was that physicians, especially pediatricians, simply couldn't accept what was happening. Pediatricians were used to thinking of parents as allies in the treatment of the child, and to see parents as child abusers went against their deepest instincts. "If I thought the parent could abuse the child, I would leave pediatrics immediately!" one pediatrician stated emotionally during a meeting on child abuse.

Even if they did suspect abuse, there wasn't much they could do about it. These social forces conspired to keep child abuse a hidden event. Only after the development of teams that included social workers, pediatricians, and radiologists was intervention generally successful.

The sudden explosion of awareness on child abuse took place because a pediatrician, C. Henry Kempe, became convinced that the problem was widespread. His first brush with the problem was the faulty diagnoses of children's injuries being made by residents under his supervision at the University of Colorado Medical School.

> I was *intellectually* offended at first, before my better instincts took over, by the simply silly diagnoses being made by bright house staff in situations where nothing but child abuse *could* be the diagnosis . . . Having been intellectually engaged in the fact that the wrong diagnosis was being made each day in our hospitals, it was clear that we must do something to help.

And he did. In 1961, as the national program chair for the American Academy of Pediatrics, Kempe organized a panel on child abuse. Along with Frederick Silverman, he invited a social worker, a judge, a psychiatrist, and the director of the Health Law Center of the University of Pittsburgh. The panel was held in the Grand Ballroom of the Palmer House in Chicago, and the packed room held roughly two thousand persons, including the news media. The title of the panel was "The Battered Child Syndrome." The repercussions were powerful, immediate, and enduring. After 1961, there was a steady increase in the coverage of child abuse in medical journals, newspapers, and magazines.

But the key to uncovering the hidden event of child abuse was the establishment of new reporting channels and new laws that mandated reporting. A national survey of hospitals and district attorneys conducted

in 1961 by one of Kempe's students had revealed hundreds of cases. Almost no one at the time suspected, however, that the real figure might be in the hundreds of thousands, or even a million cases annually. What has allowed society to "see" child abuse is not only a novel medical concept, but changed laws, the extension of protective services, interested media and, above all, a widened public awareness.

What Else Is Out There?

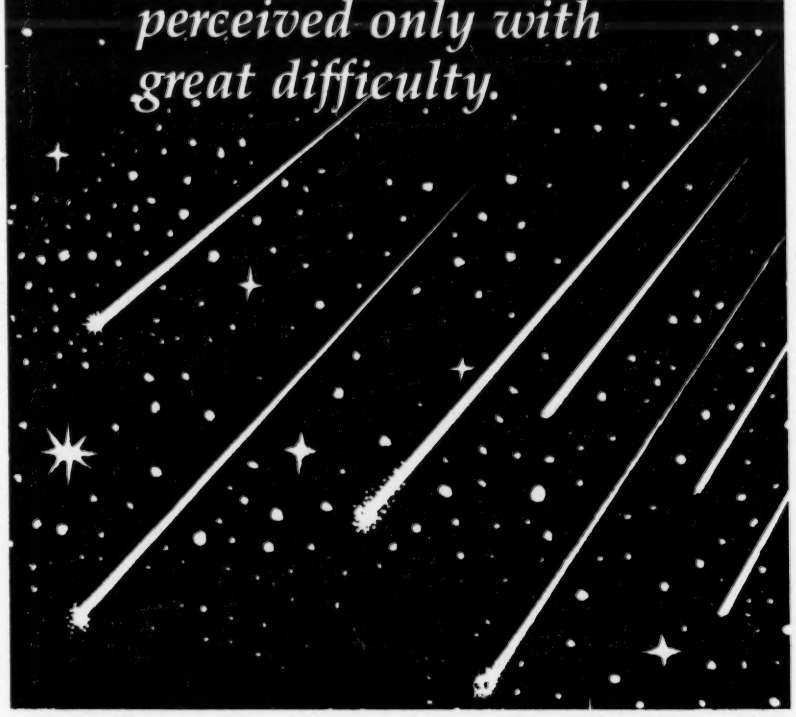
We have discussed meteorites, lightning balls, and battered children, and have seen in each case the difficulty that science and society have had in perceiving the anomalous event. An obvious question presents itself: What else is being missed?

In my studies of social flows of information relating to a number of interesting hypothetical anomalies such as UFOs, sea serpents, bigfoot, and spontaneous human combustion, I have found exactly the same kind of reticence to report observations as I have discussed in relation to the real anomalies above. As Ludwik Fleck would have been interested to know, the unusual event is generally not reported; if reported, it is not published; and if it is published, it is usually ridiculed. And so, simply, it is not part of our socially constructed reality.

This does not mean, of course, that every event so hidden is a real anomaly. Most UFO sightings, about 90 percent, prove on investigation to be quite ordinary things that have been misperceived. (Regarding the UFO cases whose explanation is *not* apparent, it would take an article the length of this one merely to introduce the subject. As an introduction, I would recommend *The UFO Experience* by the late Dr. J. Allen Hynek, first published in 1972.) Most anomaly investigators can relate a large number of cases of mistaken identity and a smaller, but usually quite memorable, number of hoaxes. Many things that don't fit scientific theories don't fit them because they truly don't exist.

What I worry about, though, are the anomalies that aren't controversial, the ones that may not even appear in the *Catalogs* of William Corliss, discussed elsewhere in this issue (see p. 43). We human beings are relentless experimenters with the world in which we live, but our ability to monitor the results is very modest in comparison to our ability to cause changes. The study of social intelligence

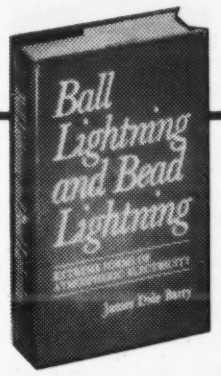
Our early warning systems are set up to monitor the things we know about. Those whose existence we do not suspect are perceived only with great difficulty.



regarding anomalies teaches us that our early warning systems are set up to monitor the things we know about. Those whose existence we do not suspect are perceived only with difficulty and after much struggle. Some years ago, the Smithsonian Institution set up a special network to monitor unusual events, but it described *in advance* what things it wanted to find out about. It was not disappointed; few of the events reported to it belonged to undesignated categories. In recent years, the Smithsonian's network has narrowed the categories reported upon. The "self-constructed model" still guides the research we do. Again, every system of knowledge is likely to have built-in blind spots.

These blind spots are worth studying. They may hide things that are interesting and things that are dangerous. The discovery of the battered child syndrome helped to pave the way for the discovery of other categories of abused persons in society, including sexually abused children. I wonder what kind of environmental problems are hidden from our view because their manifestation seems too implausible to report. I am far from sanguine about the effects of the technologies, physical and biological, that we are introducing into the ecology of the planet and our daily lives. And unless we do a great deal to improve our social intelligence about the unexpected event, we may miss the signals that tell us we have gone too far. ■

Ball Lightning and Bead Lightning



Ball Lightning and Bead Lightning
James Dale Barry
1980; 298 pp.
$35
postpaid from:
Plenum Press
227 West 17th Street
New York, NY 10011

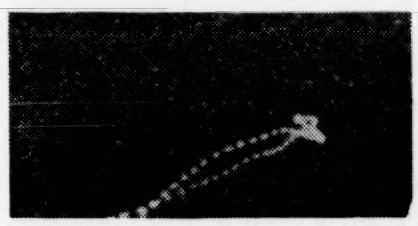
This book is a good, science textbook-style introduction to two forms of lightning that are so rare that not all atmospheric physicists even agree they exist. Ball lightning is a short-lived, mobile, luminous sphere that seems to appear after a lightning discharge, and bead lightning is a chain of luminous fragments that apparently forms in an imperfect lightning discharge channel. The author assumes the two are related and presents deductions about the physical characteristics of ball lightning based on an analysis of over 1,100 reports, including: it has a diameter of about 10-15 cm, a density about equal to that of air, a temperature in the 4,500 - 10,000 K range (about 8,700-18,600°F), and may have a strong magnetic field. Various theories of ball and bead lightning are outlined, and there's a chapter on laboratory-produced ball lightning. The 1,800-entry bibliography is the best available on this subject. The author has taken great pains to reproduce virtually every known photo of these two types of lightning; too bad most of them are blurry and indistinct. I guess that's to be expected from snapshots of two of nature's most elusive wonders.

—Ted Schultz

Photograph of a woodcut illustrating the accidental death of Dr. Richmann in St. Petersburg in 1753, reportedly by a ball lightning. The ball lightning is thought to have developed from the experimental apparatus used to measure the electrification of storm clouds.

•

Damage and Heat. Since ball lightning is apparently an atmospheric electrical phenomenon, the emission of heat would be expected. A small number of observers do report that heat emission was experienced during the event. Stenhoff (1976) discussed a ball lightning that came in contact with the observer and caused burns on her hand and damage to her clothing. Owen (1886) reported an observer burned when the ball lightning touched her foot, and Anon (1890e,n) reported a man burned and rendered unconscious.



Still camera photograph taken during a thunderstorm showing a trace of varying brightness identified as that of a bead lightning.

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A relationship between ball lightning and the St. Elmo's Fire discharge has been suggested many times. It has been postulated that some rarely occurring situation leads to the transformation of St. Elmo's Fire into a ball lightning. Such an observation has been reported only twice among the more than 1100 reports accumulated by this author. Kerkhoff (1913) and M. Scott (1878a) reported that a glowing ball, initially hovering above an object on the ground, suddenly moved away, free of its attraction for the grounded object. Such observations, although rare, may represent the only observations of the origin of a ball lightning.

Zetetic Scholar

"Zetetic" means "skeptically inquiring." This judicious journal is published on an irregular schedule by the Center for Scientific Anomalies Research, headquartered at Eastern Michigan University. The CSAR stands somewhere between the uncritical "Fortean" press represented by the ***Fortean Times*** *(p. 51) or* ***Fate*** *(p. 70), and the debunking-prone skepticism of the Committee for the Scientific Investigation of Claims of the Paranormal's (CSICOP)* ***Skeptical Inquirer*** *(p. 16). In fact,* ***Zetetic Scholar*** *editor Marcello Truzzi edited the first few issues of CSICOP's journal before starting his own. The tone in the* ***Zetetic Scholar*** *is much more even-handed as far as the "paranormalists versus skeptics" debate goes; the* ***Zetetic Scholar*** *encourages responsible, open-minded scientific inquiry into paranormal claims. Some* ***ZS*** *articles examine such claims, but the bulk of the journal is devoted to discussion of strategies for dealing with anomalous claims in an atmosphere suggestive of the planning stages of a fledgling science. The liveliest part of* ***ZS*** *is the extensive "Dialogue" section, where intelligent, articulate folks with varying reasons for being interested in anomalistics carry on lively conversations. When a recent scandal broke out in CSICOP because one Committee member accused others of deliberately misrepresenting the research of French statistician Michel Gauquelin in a CSICOP-sponsored debunking of astrology, the pages of* ***Zetetic Scholar*** *— not* ***Skeptical Inquirer*** *— became the place where the debate was aired. —Ted Schultz*

Zetetic Scholar
Marcello Truzzi, Editor
$12/year
(2 issues) from:
Zetetic Scholar
Department of Sociology
Eastern Michigan University
Ypsilanti, MI 48197

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Science is always incomplete and fallible. Ideally, it should be a self-correcting system that will slowly and conservatively accept and integrate new anomalies into our scientific view of the world. Anomalies represent a crisis for existing theories, but they also represent opportunities for new, advanced theories. But we should not confuse our constructive and open attitude towards anomalies with *mystery mongering*. Many Forteans, for example, seem to enjoy anomalies for the discomfort they cause scientists. An anomaly is important to science only in so far as it can lead us to better theory and incorporation of the anomaly so that it is no longer anomalous. The goal is to produce better and more complete science; it is not to embarrass science.

•

Rawlins alleged that CSICOP had not only demonstrated gross incompetence but had engaged in what he termed a "cover up" and "censorship" in its handling of the tests it sponsored on psychologist Michel Gauquelin's "neoastrological" Mars Effect claim. Rawlins alleged that his own ejection from CSICOP was the result of his attempts to get CSICOP leadership to publicy confess their errors. This defense of Gauquelin's claim was particularly surprising since Rawlins was a vigorous opponent of the Mars Effect and a strong critic of Gauquelin.

An Encyclopedia of Anomalies
The Sourcebook Project

by William R. Corliss

After more than thirteen years of scouring the scientific and semiscientific literature for anomalies, my major conclusion is that this is an amazingly fruitful activity. In fact, organized science should have been doing the same searching and compiling for the past 200 years. It is simply astounding that a Catalog of Scientific Anomalies does not already exist to guide scientific thinking and research. It is at least as important to realize what is *not* known as it is to recognize the well-explained. My *Catalog* is largely the product of one person's library research, carried forward without grants, contracts, or donations.

Under the aegis of the Sourcebook Project, I have already published 20 volumes, totalling well over 7,000 pages of source material on scientific anomalies. As of this moment, these 20 volumes represent only about 25 percent of my database. New material is being added at the rate of about 1,200 new articles and items per year, about 300 of which are from the current literature. These rates could be easily multiplied several times over by spending more time in libraries. Even after thirteen years, only the scientific journals of the United States and England have received my serious attention. There remain the English-language journals of the rest of the world, those journals in other languages, university theses, government reports, the publications of scientific research facilities, conference papers, untold thousands of books, and an immense reservoir of newspapers. The cataloging task has just begun. The anomalies residing in the world's literature seem nearly infinite in number.

Given this rough assessment of the magnitude of the anomaly literature, one can understand why the *Catalog of Anomalies* will require at least 25 volumes, with master indexes, as only the initial step in providing scientists with ready access to what is not, in *my* opinion, well-explained.

Will the *Catalog of Anomalies* revolutionize science? Probably not — at least not immediately. Quite often the initial reaction to the books of anomalies already published has been disbelief. The data must be in error; the data are mainly testimonial; the data are too old; the supposed anomaly was explained long ago. Germs of truth reside in all these complaints. But for every anomaly or example that can be legitimately demolished, ten more take its place. Nature is very anomalous or, equivalently, nature is not yet well understood by science. Much remains to be done.

—William R. Corliss

How Data and Anomalies Are Evaluated in the *Catalog*

Each anomaly type is rated twice on four-level scales for data "validity" and "anomalousness," as defined below. These evaluations represent only the opinion of the compiler and are really only rough guides.

Data Evaluation Scale

1. **Many high-quality observations. Almost certainly a real phenomenon.**
2. **Several good observations or one or two high-quality observations. Probably real.**
3. **Only a few observations, some of doubtful quality. Phenomenon reality questionable.**
4. **Unacceptable, poor-quality data. Such phenomena are included only for the purposes of comparison and amplification.**

Anomaly Evaluation Scale

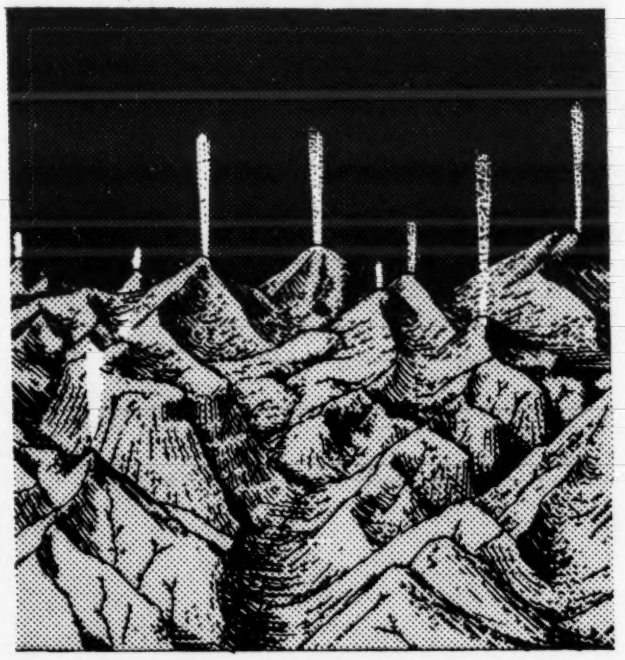
1. **Anomaly cannot be explained by modifications of present laws. Revolutionary.**
2. **Can probably be explained through relatively minor modifications of present laws.**
3. **Can probably be explained using current theories. Primarily of curiosity value.**
4. **Well-explained. Included only for purposes of comparison and amplification.**

Anomalies that rate "1" on both scales are very rare. Such anomalies, however, are the most important because of their potential for forcing scientific revolutions. As additional *Catalog* volumes are published, the relative proportion of "double-1s" will increase, especially in the fields of biology and psychology.

The Sourcebooks *are the* Encyclopedia Britannica *of the unexplained. Over thirteen years ago, physicist and science writer William R. Corliss began to methodically search the scientific literature and to extract and categorize reports of anomalistic phenomena. We present here a small sampling from his* Anomaly Catalog *series, though it's difficult to convey the comprehensive flavor of these volumes in a short excerpt. You'll notice that Corliss, in true catalog fashion, uses letter-and-number codes like "GLW4" and "X54" to label each anomaly type and example. These become especially useful to the reader of the* Catalogs *proper, which can be ordered from The Sourcebook Project, P. O. Box 107, Glen Arm, MD 21057. Write for a free copy of Corliss' newsletter,* Science Frontiers.

—Ted Schultz

Diffuse Electrical Discharge Phenomena (GLD)



Aurora-like pillars of light over the Andes.

Key to Phenomena

GLD1 Mountain-Top Glows
GLD2 Intermountain Electric Discharges
GLD3 Electric Fluids: Large-Scale St. Elmo's Fire
GLD4 Moving, Surface-Level, Electrified Light Patches
GLD5 Unusual Electric Discharge Phenomena during Duststorms and Snowstorms
GLD6 Unusual Manifestations of St. Elmo's Fire
GLD7 Luminous Aerial Bubbles
GLD8 Earthquake Lights
GLD9 Volcano Lights
GLD10 Tornado Lights
GLD11 Whirlwinds of Fire and Smoke
GLD12 Anomalous Flashes Detected by Satellite
GLD13 Enhanced Luminosity of Rocks and Other Solids
GLD14 Luminous Phenomena in Water and Ice
GLD15 Dazzling Lights in and on Clouds
GLD16 Luminous Patches Moving on Cloud Surfaces
GLD17 Ground-Level Light Flashes

Everyone is familiar with fast, concentrated discharges of electricity, such as lightning. More rare are the slower, more diffuse flows of natural electricity. In these, the passage of electrical currents is gentle and almost soundless in contrast to the violent thunderbolt. Even so, these slow discharges frequently give rise to luminous, often strangely beautiful phenomena.

Slow electrical discharges usually proceed from projections and sharp points, such as ship masts, radio antennas, and even human fingers held aloft. Pointed structures tend to concentrate electrical fields and, if the fields are intense enough, will encourage a slow flow of electricity from the point into the surrounding air. When these discharges become luminous, they are called St. Elmo's Fire, a well-known bluish electrical glow that occurs on the masts of ships at sea. In damp and stormy weather, high voltage power lines may exhibit eerie luminous discharges around insulators and other structures. These bluish glows are termed "corona discharges." Reports from ships at sea and mountain-top scientific observatories tell of St. Elmo's Fire in the form of cold lambent flames and auras streaming from scientific instruments, guy wires, and even peoples' heads. St. Elmo's Fire also appears infrequently in snowstorms and sandstorms, as the falling and blowing particles transfer electricity between the earth and the air like those Wimshurst electrostatic machines so common in high school physics laboratories.

Corona discharge and St. Elmo's Fire are not particularly mysterious to physicists; they therefore constitute a good starting point for a journey into more controversial territory.

The next stop is a truly spectacular one: the so-called Andes Glow or, to be more general, the mountain-top glow. Since many mountains pierce the atmosphere with sharp projecting surfaces, the appearance of slow electrical discharges from their crests is not especially surprising. It is the scale of the process that is awe-inspiring. The sheets of flame and aurora-like beams of light projecting into the stratosphere may be visible for hundreds of miles. Where does this mountain electricity go? Into outer space? And why are mountaintop glows greatly enhanced during major earthquakes? No one has really studied this phenomenon carefully. It is in essence St. Elmo's Fire on a massive scale.

On a smaller, less-violent scale, intense electrical storms may create ground-level patches or waves of luminous electrical activity that may engulf humans in their paths, electrically shocking them or wrapping them in a garment of St. Elmo's Fire. In some ways, these surface displays resemble the marine phosphorescent displays, particularly the rotating phosphorescent wheels, described elsewhere in the *Catalog*.

Considerably more mysterious are the glowing, enigmatic, floating spheres that observers often compare to toy balloons. These cavorting softly-lit bubbles are certainly not ball lightning and may not even be electrical at all. Whatever they are, modern science has paid little attention to them, perhaps because their explanation is so difficult and their existence so improbable.

These subjects bring us to those strange glows, flashes, and fireballs seen so often near earthquake epicenters. Earthquake lights also take the shapes of auroral beams, mountaintop glows, ball lightning, and moving waves of rock luminosity. Since modern scientific observations demonstrate that earthquake shock waves may penetrate the atmosphere into the ionosphere, it is possible these atmospheric disturbances may help create low-conductivity

paths for earth-to-space electrical discharges. The ball lightning, the sheets of flame issuing from the ground, and other localized luminous phenomena may be generated by large-scale piezoelectric effects (i.e., the creation of electricity by stresses in rocks). An alternate explanation of earthquake lights involves the spontaneous ignition of natural gas liberated by the quaking earth.

Violent volcanoes and tornadoes also display unusual lights. Of course, normal lightning and ball lightning are to be expected in violent storms, but whence the peculiar shafts of light reported in tornado funnels and the strange glowing patches in and above storm clouds? The precise role of electricity in tornado action, if any, is highly controversial. Superficially at least, the funnel light columns may, like neon lights, arise from large-scale glow discharges in these naturally formed tubes.

That the earth-as-a-whole is a gigantic electrical machine cannot be doubted. The constant turmoil of the atmosphere, its never-ceasing bombardment by the solar wind, the electrically charged wind-blown dust and snow, and the intense forces squeezing terrestrial rocks, all conspire to create a wide spectrum of curious and poorly understood luminous effects.

Mountain-Top Glows (GLD 1)

Description: Rays, undulating streamers of light, flashes, and steady glows appearing along mountain crests and ridges. The color is usually yellowish white, with green and orange being more rare. This phenomenon is observed in the Andes, the Alps, the Rockies, the Arctic, and probably many other places.

Background: Despite the widespread occurrence of mountain-top glows, science has taken little note of them. Instrumented studies are essentially unknown.

Data Evaluation: Many high quality observations, especially from the Andes and Alps. Rating: 1.

Anomaly Evaluation: Mountain-top glows are probably large-scale discharges of terrestrial electricity into the atmosphere — that is, greatly magnified St. Elmo's Fire. The anomalous aspects are: (1) The very large scale of the phenomenon; (2) The apparent heightening of the displays during earthquakes; (3) The possible periodicity of the flashes; (4) The close resemblance to auroras, which seems to underscore the reality of low-level auroras (GLA4). Rating: 3.

Possible Explanation: Large-scale discharge of terrestrial electricity.

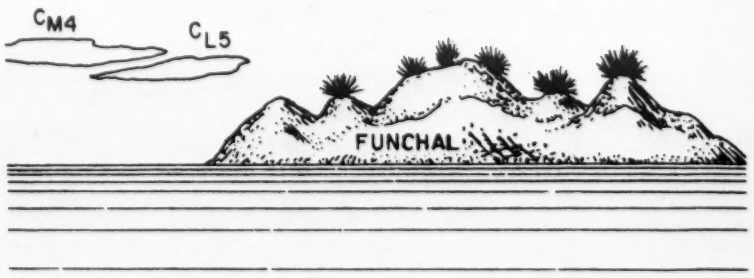
Similar and Related Phenomena: Low-level auroras (GLA4); aurora-related fogs and mists (GLA21); earthquake lights (GLD8).

The* Catalog *lists over 20 cases of mountain-top glows. Here are a few examples:

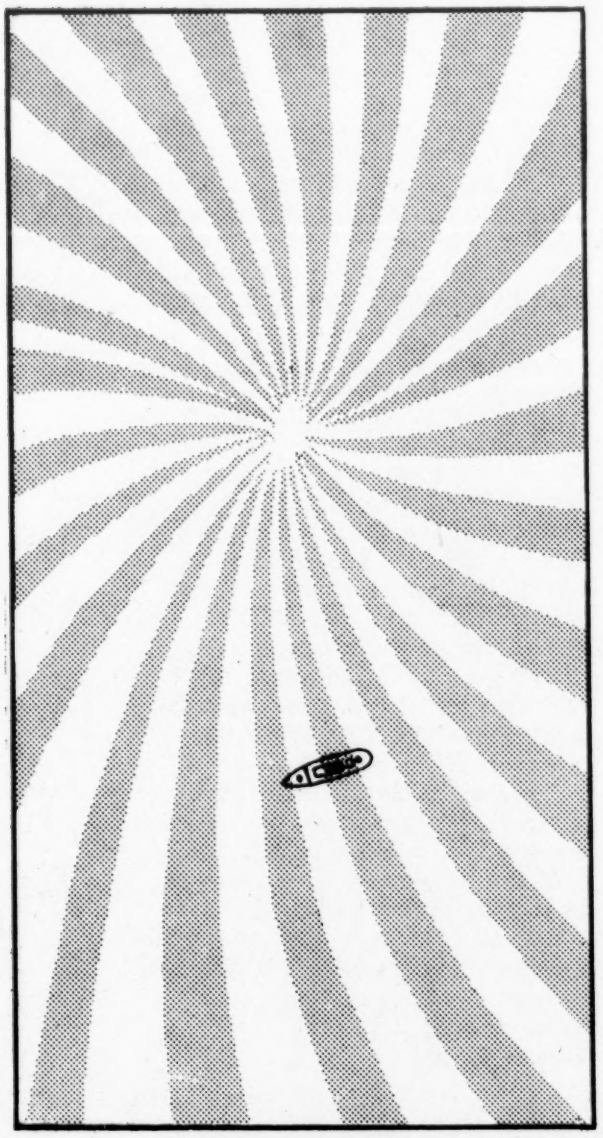
X7. June 7, 1954. Madeira. "On approaching Madeira from SW the island was completely covered with low cloud, stratus and stratocumulus. On arriving within 16 miles of the island the cloud rapidly lifted and numerous brilliant white flashes were observed at frequent intervals on various mountain peaks. At the time of these occurrences the cloud was clear of the island, although there was some stratocumulus to NW. After the flashes had continued for some 20 minutes, a low rumbling was heard like distant thunder."
—Robson, G.; Marine Observer, 25:95, 1955.

X8. General observation. The Andes. "Thunderstorms are rare in Chile, and this fact may possibly be explained on the assumption that the Andes act as a gigantic lightning rod, between which and the clouds silent discharges take place on a vast scale. The visible discharges occur during the warm season, from late spring to autumn, and appear to come especially from certain fixed points. According to Dr. Knoche they are confined almost exclusively to the Andes proper, or Cordillera Real, as distinguished from the coast cordillera. Viewed from a favorable point near their origin there is seen to be, at times, a constant glow around the summits of the mountains, with occasional outbursts, which often simulate the beams of a great searchlight, and may be directed westward so as to extend out over the ocean. The color of the light is pale yellow, or rarely reddish. One striking feature of these discharges is that they are especially magnificent during earthquakes. At the time of the great earthquake of August, 1906, throughout central Chile the whole sky seemed to be on fire; never before or since has the display been so brilliant."
*—"Curious Lightning in the Andes," **Scientific American**, 106:464, 1912.*
*—"Strange Kinds of Lightning," **Literary Digest**, 111:22, October 10, 1931.*

X9. General observation. The Andes. " 'Andes glow' or 'Andes lights' are terms used to describe illumination seen at night in the vicinity of certain mountain peaks. While the majority of reports have come from the Andes mountains of Bolivia, Chile and Peru, this phenomenon has also been reported in the European Alps, Mexico and Lapland and presumably could occur in many mountainous regions under favourable conditions. While sometimes thought to be lightning, for lack of a more obvious explanation, the interesting property of these light displays is that they can occur under cloudless skies. Sometimes they are but one single flash, while at other times they may persist intermittently for hours. On occasion, a periodicity has been noted in the time between flashes. At their most spectacular they have been described as '. . . not only clothing the peaks, but producing great beams, which can be seen miles out at sea.' They seem to favour particular mountain peaks where often they can be seen during the dry season."
*—Markson, Ralph and Nelson, Richard;"Mountain-Peak Potential-Gradient Measurements and the Andes Glow," **Weather**, 25:350, 1970.*



Ship approaching Madeira observes flashes of light on mountains.



General configuration of a typical phosphorescent wheel.

Key to Phenomena

GLW1	Long, Parallel, Stationary Phosphorescent Bands
GLW2	Moving, Parallel Bands of Phosphorescence
GLW3	Aerial Phosphorescent Displays
GLW4	Marine Phosphorescent Wheels
GLW5	Expanding Phosphorescent Rings
GLW6	Phosphorescent Patches Moving in Circles
GLW7	Phosphorescent Spinning Crescents
GLW8	Zigzag Phosphorescent Flashes
GLW9	White Water or Milky Sea
GLW10	Radar-Stimulated Phosphorescent Displays
GLW11	Te Lapa: Underwater Lighting
GLW12	Moving, V-Shaped Phosphorescent Displays
GLW13	Colored Rays Emanating from Ships
GLW14	Radar Detection of Phosphorescence

Marine Phosphorescent Displays (GLW)

Ships that ply the Indian Ocean, particularly the waters leading to the oil-sodden lands around the Persian Gulf, frequently encounter dazzling phosphorescent seas. As Kipling described it, the ship's wake is "a welt of light that holds the hot sky tame." Huge globes of light rise from the depths and burst on the surface. Wavetops sparkle, porpoises resemble luminous torpedoes, and broad geometrically precise corridors of light stretch from horizon to horizon. Buckets lowered into these glowing seas prove that marine organisms seem to cause most of the phosphorescent displays.

Phosphorescent ship wakes are mundane and unimpressive compared to the vast rotating wheels of light and the other fantastic luminescent displays encountered from the Persian Gulf, across the Indian Ocean, and into the South China Sea. Ridiculed as wild sailors' tales for centuries, modern ships have reported scores of bona fide geometrical displays. Mariners tell of great spoke-like bands of light seemingly spinning about some distant hub. Occasionally several wheels will overlap, while simultaneously turning in clockwise or counterclockwise senses, creating a vast tableau of moving spokes miles wide. Expanding rings of light and bright whirling crescents (the latter radar-stimulated) may also decorate the ocean surface. Crews that see these fantastic apparitions do not soon forget them. Scientists, alas, have generally ignored these awe-inspiring apparitions.

One's first reaction is to explain the wheels of lights and related geometrical displays in terms of marine bioluminescense stimulated by natural forces that, like the wake of a ship, leave behind glowing evidence of their passage. Sound waves emanating from submarine disturbances have been the most popular type of disturbance in this explanation. But what combination of seismic waves could stimulate overlapping, counterrotating wheels or hundreds of spinning phosphorescent crescents? Furthermore, there are several well-attested cases where the luminous displays were seen in the air well above the sea's surface. This fact plus the persistence of the phenomena (about half an hour) and the complex nature of the displays suggest that we look for other stimuli and nonbiological sources of light.

The physical forces that create the auroras and the Andes Glow may be at work near the ocean's surface, unlikely as it may seem. To illustrate this possibility, the luminous mist seen during some low-level auroras closely resembles the aerial phosphorescence seen in some marine displays. Some ship captains have, in fact, noted the similarities between auroral and marine phosphorescent displays. The curious interaction of radar with marine phosphorescence is also suggestive. Another potential explanation would use the collective behavior of marine bioluminescent organisms. Travelers in the tropics, for example, tell amazing accounts of the synchronized flashing of immense assemblages of fireflies. Could marine bioluminescent organisms indulge in similar cooperative action? If so, how do they communicate pattern geometries and why?

Many other questions can be asked about marine phosphorescent displays. Why are most concentrated in the Indian Ocean and South China Sea when other seas also teem with bioluminescent organisms? Where does the mysterious underwater lightning, called *te lapa* by the Polynesians, fit in? Unfortunately only a few scientists have deigned to notice this fertile field of research.

Marine Phosphorescent Wheels (GLW 4)

Description: Spoke-like bands of light rotating around a central hub. The spokes may be straight, curved, or S-shaped. Rotation is in either direction and may change during the display. In some cases, the outer part of the wheel seems to spin in a different sense from the central part. Illustrating the illusory character of the phenomenon, different observers sometimes see the same wheel rotating in opposite directions. Wheel sizes range from tens of feet to several miles, with spoke widths of 5-50 feet being common. Generally, the sources of light seem to be on or just beneath the surface, but several examples exist of wheels composed of luminous mist spinning well above the sea's surface. Spoke colors are whitish and greenish in most cases. Several wheels may appear simultaneously, rotating in various senses with overlapping patterns. Phosphorescent wheel displays are frequently preceded and followed by displays of moving, parallel bands (GLW2). Like the moving band displays, the phosphorescent wheels are most common in the Indian Ocean, especially the Persian Gulf, and the China Sea. The few wheel-like structures seen in other waters are usually poorly formed and stationary. The duration of a wheel-type display lasts from a few minutes to more than an hour.

Data Evaluation: Scores of well-observed examples. Rating: 1.

Anomaly Evaluation: As with most of the organized phosphorescent displays, the major problem seems to be explaining the origin and long-term stability of rather complex geometrical patterns. If the light source is not bioluminescence, as generally supposed, the anomaly is even stronger. Rating: 2.

Possible Explanations: Certainly bioluminescence is the most likely source of light, although observers frequently remark that the ship's wake is not luminous during wheel-type displays. The aerial wheels of luminous mist, if not illusory, would require air-borne organisms in cases where no wheel is visible in the water proper. Earthquake tremors may stimulate bioluminescence, with the interference patterns created by multiple sources accounting for the complex display geometries. The persistence of intricate geometries over many minutes seems to militate against this theory. Again, as in GLW3, the strong similarity of some marine phosphorescent displays to the so-called low-level auroras (GLA4) is striking. Some wheel observers have noted this, and electromagnetic forces should not be dismissed offhand.

Similar and Related Phenomena: The other marine phosphorescent displays (GLW), low-level auroras (GLA4).

The* Catalog *lists over 60 cases of phosphorescent wheels. Here are a few examples:

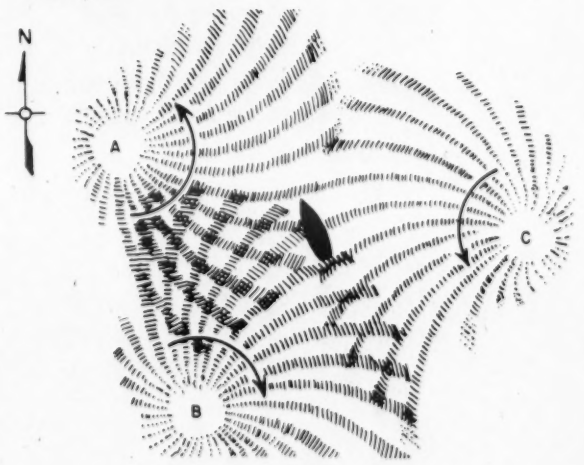
X24. April 24, 1953. Gulf of Thailand. "Faint flashes of light with oscillating movements were observed on the sea. The flashes gradually increased in strength until at 0230 they suddenly changed into rather intensive rays of light moving around centres lying near the horizon. Three groups of rays were present, as shown in the sketch. (a) One on the port bow having a bearing of about 300° with the rays rotating anticlockwise. (b) One on the port bow having a bearing of about 230°, rotating clockwise. (c) One on the starboard bow having a bearing of about 95°, rotating anticlockwise. The beams were curved with the concave side in the direction of the movement, and were passing the ship continuously with a frequency of about three a second; they looked more like glowing shafts than beams of light. Reflections on the ship were clearly visible. . . . The phenomenon lasted till 0250, and it had been clear by the increasing strength of the group ahead and decreasing strength of the group astern, that the ship was advancing through the area of phosphorescence. Soon only the oscillating flashes could be seen and they also disappeared shortly afterwards. At 0300 the situation was normal again."
—Henney, A., et al.; "Phosphorescent Wheels," Marine Observer, 24:73, 1954.

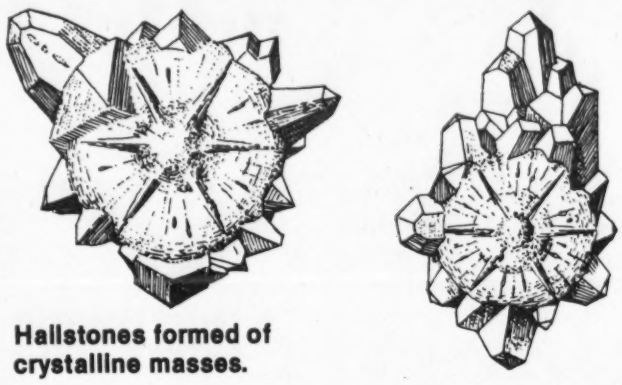
X53. March 27, 1976. Gulf of Siam. "At 1917 GMT pulsating bands of parallel light were observed in the sea moving towards the vessel from 045°T. After 2 to 3 minutes the bands took on a definite spoke formation, the centre of which was not seen but lay in the direction of 315°T. The spokes passed the vessel at an ever-increasing rate, two spokes per second at the fastest. At this time they were about 22 metres in width and there was 22 metres between each spoke. The light given off from the spokes was white to light green in colour, it increased in intensity with the speed of rotation. The direction of rotation was clockwise. By 1925 the centre of the spokes had shifted from 315° to 360°T and gradually reverted back to advancing bands of parallel light. Shortly after this the parallel bands gave way to a counter-clockwise spoke rotation. This was observed in a direction centred along 315°T from the vessel, the spokes moved across the bow to 045°T, at which point they became parallel bands which diminished in intensity. By 1934 they had completely disappeared."
—Rowntree, C., et al.; "Bioluminescence," Marine Observer, 47:17, 1977.

X57. March 6, 1980. Arabian Sea. "At 1552 GMT bioluminescence in the form of diffused white light in 'whirlpool' and 'cartwheel' formations was observed; within 3 minutes it completely encircled the vessel and extended to the horizon. The 'cartwheel' formations were brightest at the centre with a halo effect surrounding the outer edges. As the vessel passed over 2 such formations the 'spokes' were estimated to be 2 to 2½ metres in width and the entire concentration, which was more than the width of the vessel (approximately 27 metres), was observed on both sides of the bridge-wing simultaneously. The 'whirlpool' formations, with a distinct central hub, varied from 1¼ to 2 metres in width and from 1 to 15 metres in length. The phenomenon was observed for 40 minutes."
—Messinger, P.A.; "Bioluminescence," Marine Observer, 51:13, 1981.

X60. General observation. Light wheels are mostly confined to the continental shelves of Asia and Middle East. They may be caused by earth tremors.
—"Do Earthquakes Cause Glowing 'Wheels' on the Sea?" New Scientist, 10:528, 1961.

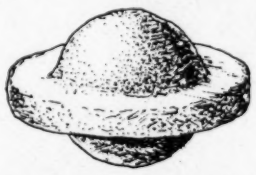
Three phosphorescent wheels turning simultaneously in the Gulf of Thailand.



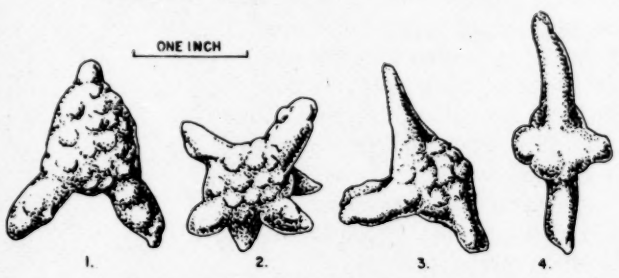


Hailstones formed of crystalline masses.

Irregular hail, England, 1862. Many examples of each type fell.



Spherical hail with raised rims, looking like the planet Saturn, that fell in Guildford, England, on June 25, 1888.



Irregular hailstones that fell in England in 1893.

Hailstones with Anomalous Shapes
(GWP4)

Key to Phenomena

GWF1	Ice Falls or Hydrometeors
GWF2	Stone Falls
GWF3	Sulphur/Pollen Falls
GWF4	Falls of Miscellaneous Inorganic Substances
GWF5	The Fall of Manna
GWF6	Unusual Falls of Hay and Leaves
GWF7	Gelatinous Meteors or *Pwdre Ser*
GWF8	Prodigious Falls of Web-Like Material
GWF9	Falls of Miscellaneous Organic Substances
GWF10	Fish Falls
GWF11	Falls of Frogs and Toads
GWF12	Insect Falls
GWF13	Bird Falls
GWF14	Falls of Miscellaneous Living Animals

Falls (GWF)

Anomalous rain, snow, and hail are treated in another chapter of the *Catalog*. Beyond these "nearly normal" forms of precipitation are those falling materials that do not belong aloft at all: large chunks of ice, living animals, nonmeteoric stones, and many other nominally terrestrial materials. Charles Fort, who is regarded as the father of anomaly research [see p. 51], made much of falling materials, even though most of them can be explained rationally by appealing to recognized meteorological mechanisms, i.e., whirlwinds, waterspouts, tornados, etc. Fort did have a point, however: any small minority of falling material not succumbing to conventional explanations would require truly revolutionary explanations. Such is the claim of residual anomalies in all areas of science — and this claim is perfectly valid in this chapter.

The overwhelming majority of falls consist of terrestrially derived material and earth-dwelling animals. So-called sulphur falls almost invariably turn out to be wind-blown pollen. The sensationalized falls of fish and frogs, which are well-verified in the literature, are easily explained in terms of whirlwinds, waterspouts, and tornados. Immense falls of hay, leaves, and insects, though startling, are scarcely anomalous. Nature provides ready sources of such material as well as natural vacuum cleaners to snatch up light-weight objects and deposit them somewhere else. Even so, these types of falls present some enigmatic aspects: (1) The descent of some species of animals is so overwhelming in quantity that scientists are hard-pressed to explain where they could have all been collected; (2) The "purity" of the falls, that is, the absence of coexisting species and debris from the falling animals' habitat.

Falls of cobwebs and the so-called gelatinous meteors (or "pwdre ser," which in Welsh means "rot of the stars") introduce a more unsettling factor. While admitting the reality of ballooning spiders, it seems that some of the great web falls involve a substance that may not be insect-produced — it is too strong and quickly evaporates away. It also falls in strands hundreds, even thousands of feet long. Some gelatinous meteors, too, seem to evaporate away strangely. If these properties can be verified, we have something more anomalous than a simple fish fall.

Another pair of phenomena with related characteristics will conclude this introduction: the large hydrometeors and the much-maligned thunderstone. Both phenomena typically occur during thunderstorms. A peal of thunder rings out and something strikes the ground nearby. If one finds a large chunk of ice, a passing plane can always be blamed; but if one find a stone or even a meteor, emotional disbelief takes charge. Yet, no physical reason bars the fall of meteorites during thunderstorms, nor can one deny the possibility of a strong whirlwind picking up a stone of several pounds weight and releasing it during a thunderstorm. After all, some large hailstones reach several pounds, too. The point here is that the possibility of stonefalls should not be dismissed out-of-hand because of any innate distrust of legends carried over from ancient times.

The data presented in this section show rather conclusively that odd things do fall from the sky on occasion. Regardless of the sensationalism usually attached to these falls, most of them are not really very anomalous. A rain of frogs may be rare and certainly Fortean, but meteorology is well equipped to deal with most aspects of this phenomenon.

Ice Falls or Hydrometeors (GWF 1)

Description: Chunks of ice that fall from the sky that are substantially larger than the largest recognized hailstones; that is, more than five inches in diameter or weighing more than two pounds. The ice pieces may fall from a clear sky or they may descend after a powerful stroke of lightning. The chunks may be clear ice, or layered structures, or aggregations of small hailstones. This diversity of structure and meteorological conditions suggests that ice falls may have several different origins.

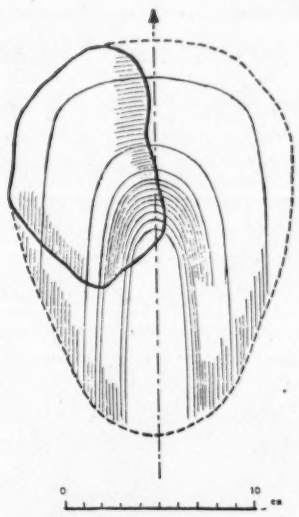
Background: Today, the fall of large ice chunks is usually blamed on aircraft passing overhead. Certainly, aircraft constitute a likely source, but there are many pre-Wright examples of this phenomenon. Furthermore, aircraft can be ruled out in some modern cases. Nevertheless, it seems that most people are satisfied with the aircraft explanation — perhaps because other origins are difficult to imagine.

Data Evaluation: Some of the older data may seem apocryphal, but there are so many modern ice falls, some investigated by meteorologists, that no one can deny that large ice chunks do fall from the sky on occasion. Rating: 1.

Anomaly Evaluation: Given the fact of ice falls, it seems that large ice chunks weigh so much that the prevailing theory of hail formation in storm cells is inadequate to explain them. The vertical winds in hailstorms do not seem powerful enough to support the large pieces of ice under discussion here. In fact, some modern ice falls are so large that the customary "aircraft" explanation would seem to be wanting. Rating: 2

Possible Explanations: (1) The vertical winds in storm cells are much stronger than generally recognized; (2) Some unappreciated mechanism in hailstorms permits the sudden aggregation of many hailstones; (3) Those hydrometeors that fall after severe lightning strokes may be formed in the lightning discharge channels, possibly as a result of electrostatic forces; (4) Some ice chunks may be true meteors, i.e., from outer space. This last explanation has been ridiculed in the past but some meteorologists are now seriously proposing it, noting in passing that Saturn's rings may be composed of ice chunks.

Similar and Related Phenomena: The fall of meteor-like objects during thunderstorms (GWF2); giant snowflakes (GWP2); giant hailstones (GWP5).



Layered structure of a large hydrometeor.

The* Catalog *lists over 50 cases of hydrometeors. Here are a few examples:

X10. August 1849. Scotland. "A curious phenomenon occurred at the farm of Balvullich, on the estate of Ord, occupied by Mr. Moffat, on the evening of Monday last. Immediately after one of the loudest peals of thunder heard there, a large and irregular-shaped mass of ice, reckoned to be nearly 20 feet in circumference, and of a proportionate thickness, fell near the farm house. It had a beautiful crystalline appearance, being nearly all quite transparent, if we except a small portion of it which consisted of hailstones of uncommon size, fixed together. It was principally composed of small squares, diamond-shaped, of from 1 to 3 inches in size, all firmly congealed together. The weight of this large piece of ice could not be ascertained; but it is a most fortunate circumstance, that it did not fall on Mr. Moffat's house, or it would have crushed it, and undoubtedly have caused the death of some of the inmates. No appearance whatever of either hail or snow was discernible in the surrounding district."
*—"Great Mass of Atmospheric Ice," **Edinburgh New Philosophical Journal,** 47:371, 1849.*

X42. April 2, 1973. Manchester, England. "A fragment of a very large hydrometeor was analysed in the laboratory where standard thin-section techniques were used to reveal its structure. The ice fell at the time of a severe lightning stroke which occurred in Manchester on 2 April 1973, a day when heavy rainfall was recorded in the area. Inquiries have revealed the pattern of nearby aircraft movements at the time, and it is suggested that the lightning was triggered off by an aeroplane which flew into the storm. No definite conclusion as to the origin of the sample has been arrived at, except that it was composed of cloud water." The ice chunk fell 3 meters from the observer and scattered pieces around. Weight estimate of the composite mass was about 1 to 2 kilograms. One theory proposed that such large hydrometeors may form in the lightning discharge channels with the help of electrostatic acceleration."
*—Meaden, G.T.; "The Giant Ice Meteor Mystery," **Journal of Meteorology, U.K.,** 2:137, 1977.*
*—Meaden, G.T.; "The Giant Ice Meteor or Superhailstone," **Journal of Meteorology, U.K.,** 2:201, 1977.*
*—Griffiths, R.F.; "Observation and Analysis of an Ice Hydrometeor of Extraordinary Size," **Meteorological Magazine,** 104:253, 1975.*
*—Crew, E.W.; "Fall of a Large Ice Lump after a Violent Stroke of Lightning," **Journal of Meteorology, U.K.,** 2:142, 1977.*
*—Crew, E.W.; "Atmospheric Mysteries and Lightning," **Electrical Review,** 199:21, December 17-24, 1976.*
*—Crew, E.W.; "Origin of Giant Ice Meteors," **Journal of Meteorology, U.K.,** 4:58, 1979.*
*—Crew, E.W.; "Meteorological Flying Objects," **Royal Astronomical Society, Quarterly Journal,** 21:216, 1980.*

X46. January 24, 1975. London, England. A block of ice weighing about 50 pounds fell on an apartment roof.
*—Meaden, G.T.; "The Giant Ice Meteor Mystery," **Journal of Meteorology, U.K.,** 2:137, 1977.*
*—"Large Hail in Britain in 1975," **Journal of Meteorology, U.K.,** 1:261, 1976.*

X50. March 1982, Tecumseh, Oklahoma. An ice mass estimated at 30 pounds fell on the land of A.C. Hinson. Investigating meteorologists said that it was not a hailstone but might have fallen from an airplane or even come from outer space.
*—"Sky Ice: 30-Lb. Close Encounter," **Boston Herald American,** March 16, 1982, p. 2.*

The Journal of Meteorology

The daily diary of world weather, with an emphasis on the gargantuan violences to which our atmosphere is prone. The monthly "World Weather Disasters" column serves to remind us of what fleas we are in the midst of Gaia's respiratory nuances. Reports of ball lightning, unusually large hail, tornado lightning, and other meteorological anomalies are regularly recorded here, and scholarly articles bearing such titles as "Advances in the Understanding of Whirlwind Spiral Patterns in Cereal Fields," "Electrical Aspects of Tornado Theory," and "The Origin of the Extensive Ice-Floes in the English Channel in February 1684" describe frontier meteorological research.
—Ted Schultz

•

"Two hundred yards down the street in a northerly direction a large hole about 4 feet in diameter and 3 feet deep was made in the centre of the roadway.

An eye-witness told me the lightning seemed to consist of three large balls of about three feet diameter, one above the other, which corkscrewed down from the sky to strike the roof of the houses, the first ball exploding on contact, and nothing more was seen of the other two."

28 cattle died when this tree on Mitchelstown Coop land at Moorepark, Fermoy, Co. Cork, was struck by lightning during the storms of 25th/26th July 1985.

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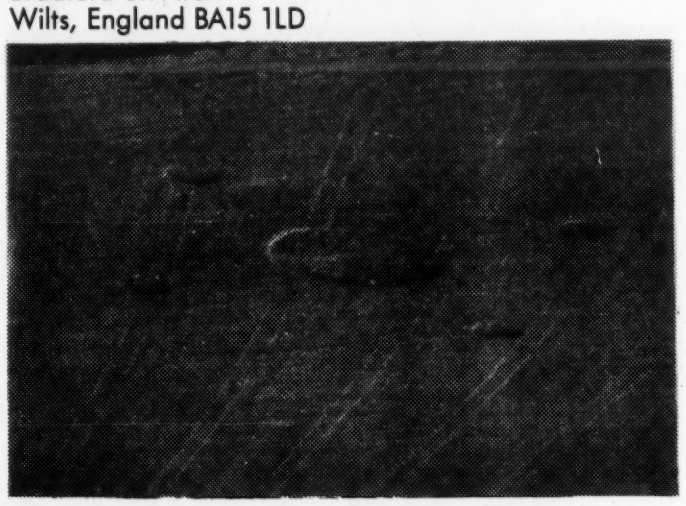

The quintuplet circles above Cheesefoot Head.

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The summer of 1984 was the fifth season in which attention has been given to probing the origin of the mysterious quasi-circular, flattened areas which are sometimes to be found in English cereal fields in the summer months. These flattened areas are circular or nearly circular in outline. Within them, the stalks of the growing cereal crops are laid down clockwise, following a spiral patterns outwards from a central point. Often there is just a single circle. On one occasion (at Cheesefoot Head, near Winchester, in 1981) there were triplets (one large circle flanked by two smaller ones), and on eight known occasions, 1980 to 1984, there have been quintuplets (a large circle attended by four evenly-spaced small satellite ones).

A Geo-Bibliography of Anomalies

This massive 1,115-page volume is an exhaustive guide to the source material for over 22,000 separate anomalistic — "weird" — events from over 10,000 localities in the U.S., Canada, and Greenland. It's a bibliography, which means that the sources (books, journal and newspaper articles) are only referenced, not reprinted. It's a geo-bibliography because it's set up to be referenced primarily by locale — state or province, city, town, lake, mountain. Chances are that your home town is included, followed by listings of UFOs (which predominate), ancient artifacts, anomalous fossils, ball lightning, coal balls, erratic animals, ghost lights, meteorite craters, musical sand, or another of the nearly 100 categories the author, a research librarian, has created to classify anomalies.

Because of the locale reference scheme, I have found this book to be an excellent companion on cross-country driving trips, directing me, with a little research, to some real off-the-beaten-path wonders. —Ted Schultz

A Geo-Bibliography of Anomalies
George M. Eberhart
1980; 1,115 pp.
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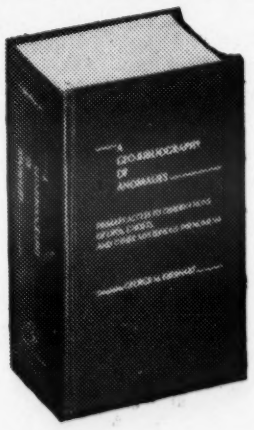

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Maine:
Physical Features

Bagaduce Point
—Sea monster 1782
Linnaean Soc'y of New England, *Report of a Committee of the Linnaean Society of New England, Relative to a Large Marine Animal, Supposed to be a Sea-Serpent* (Boston: Cumming & Hilliard, 1817).

Boon I.
—UFO 1951, winter
Horace P. Beck, *The Folklore of Maine* (Philadelphia: Lippincott, 1957), pp. 152-53.

Boyden L.
—Lake monster myth
Albert S. Gatschet, "Water-Monsters of the American Aborigines," *J. Am Folklore* 12 (1899): 255-60.

Brewer Pond
—Clairvoyance 1906, June 12/Eva Jordan
H. N. Gardiner, "Investigation of Clairvoyance in a Drowning Accident at Brewer, Maine," *J. ASPR* 4 (1910): 447-64.

Carver's I.
—Ancient Chimneys
Cyrus Eaton, *Annals of the Town of Warren, in Knox County, Maine* (Hallowell: Masters & Livermore, 1877), p. 20.

Chain Lakes
—Lake monster
Charles M. Skinner, *American Myths and Legends*, 2 vols. (Philadelphia: Lippincott, 1903), 2: 277-79.

Forteana

Charles Fort, the "Prophet of the Unexplained," spent his life in libraries, enjoying his favorite avocation: combing newspapers, magazines, and journals, noting down every report of a mysterious occurrence. He wove his voluminous notes into four books: ***The Book of the Damned*** *(1919),* ***New Lands*** *(1923),* ***Lo!*** *(1931), and* ***Wild Talents*** *(1932), but these texts are more than just collections of anomalous data. Fort combined a curious sense of humor with a unique, almost Taoist philosophical outlook. His books simultaneously poked fun at the scientific establishment, proposed outlandish, tongue-in-cheek theories to explain his "damned data," and proposed an unparalleled, Gaia-like "organic" cosmology. He rejected the mechanistic world view of the science of his time and proposed in its place a playful, prankster cosmos incomprehensible by logic. "If our existence is an organism, it must be one of the most notorious old rascals in the cosmos," he wrote. And he jested, "I am not now writing that God is an Idiot. Maybe he, or it, drools comets and gibbers earthquakes, but the scale would have to be considered at least superidiocy." Fort's four books have been collected into one volume,* ***The Books of Charles Fort*** *— monumentally fun reading.*

So prodigious was Fort's research task, and so appealing his philosophy, that it was inevitable that a Fortean movement would arise. American novelists Tiffany Thayer and Theodore Dreiser founded the original Fortean Society in 1931. Today the Fortean tradition is carried on by three publications: ***Fortean Times, INFO Journal,*** *and* ***Pursuit.***

Fortean Times *does the best job of exuding a delightful sense of humor and a healthy excitement for all things strange and wonderful. As Jay Kinney remarked in these pages (****CQ*** *#37, p. 102), "With several eccentric columnists, odd comic strips, and elegant shoestring graphic design,* ***Fortean Times*** *comes on as chatty as an affable old geezer who delights in the strangeness of the human condition."*

Both ***INFO Journal*** *(published by the International Fortean Organization) and* ***Pursuit*** *(published by the Society for the Investigation of the Unexplained) feature anomaly news items and original articles, including useful surveys of particular recurring phenomena like "falls of ice" or "phantom cats."* ***Pursuit*** *additionally offers an occasional venture into the more turgid realm of dubious metaphysical theory.* —*Ted Schultz*

Photo of Loch Ness monster by Doc Shiels. —*Fortean Times*

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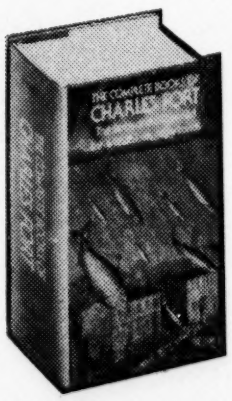

The Complete Books of Charles Fort
Charles Fort
1975; 1125 pp.
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An unclothed man shocks a crowd — a moment later, if nobody is generous with an overcoat, somebody is collecting handkerchiefs to knot around him.

A naked fact startles a meeting of a scientific society — and whatever it has for loins is soon diapered with conventional explanations.

—*The Complete Books of Charles Fort*

•

We shall pick up an existence by its frogs.

Wise men have tried other ways. They have tried to understand our state of being, by grasping at its stars, or its arts, or its economics. But, if there is an underlying oneness of all things, it does not matter where we begin, whether with stars, or laws of supply and demand, or frogs, or Napoleon Bonaparte. One measures a circle, beginning anywhere.

I have collected 294 records of showers of living things.

Have I?

Well, there's no accounting for the freaks of industry.

—*The Complete Books of Charles Fort*

•

An Egyptian parliamentary committee studying drug abuse has revealed that cocaine sold in Egypt is being cut with a secret ingredient, to increase its weight — powdered human head bones. One snort and you can be out of someone else's skull! (*Guardian* 4 Jan 1986).

—*Fortean Times*

•

Somehow, in a way that baffles geologists, a massive chunk of earth has been plucked from a remote plateau in North Central Washington and put down, right side up, 73 feet away. There is no evidence that humans had anything to do with it. Neither are there any marks of machinery. The piece of earth, which remained largely intact during its move, is estimated to weigh at least three tons.

"All we know for sure is that this puzzle piece of earth is 73 feet away from the hole it came out of," said Greg W. Behrens, a geologist with the Bureau of Reclamation at Grand Coulee Dam. —*INFO Journal*

•

I discovered that reports and sightings of monster creatures inhabiting the inaccessible and uncharted intraterritories of Africa date back to the time of first intrusion by Europeans. And, naturally there are much older talks from among the native populations. John Jordan related his personal experience of shooting, with a high-caliber .303 rifle, a "creature" the likes of which he never imaged to exist. His physical description of the animal matched, almost perfectly, that Ankylosaur dinosaur species — a species which at that point had not been classified, much less identified, by scientists.

—*Pursuit*

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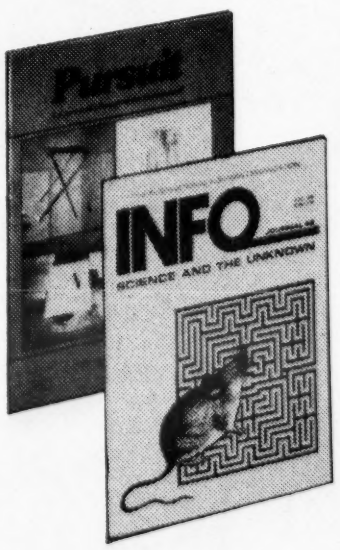


Spontaneous Human Combustion

by Kevin Kelly

Every once in a while, according to some researchers, a living human body will ignite and consume itself with its own heat. There are about 200 recorded cases of this curious demise and from these episodes springs enough of a pattern to allow a general description of the phenomenon.

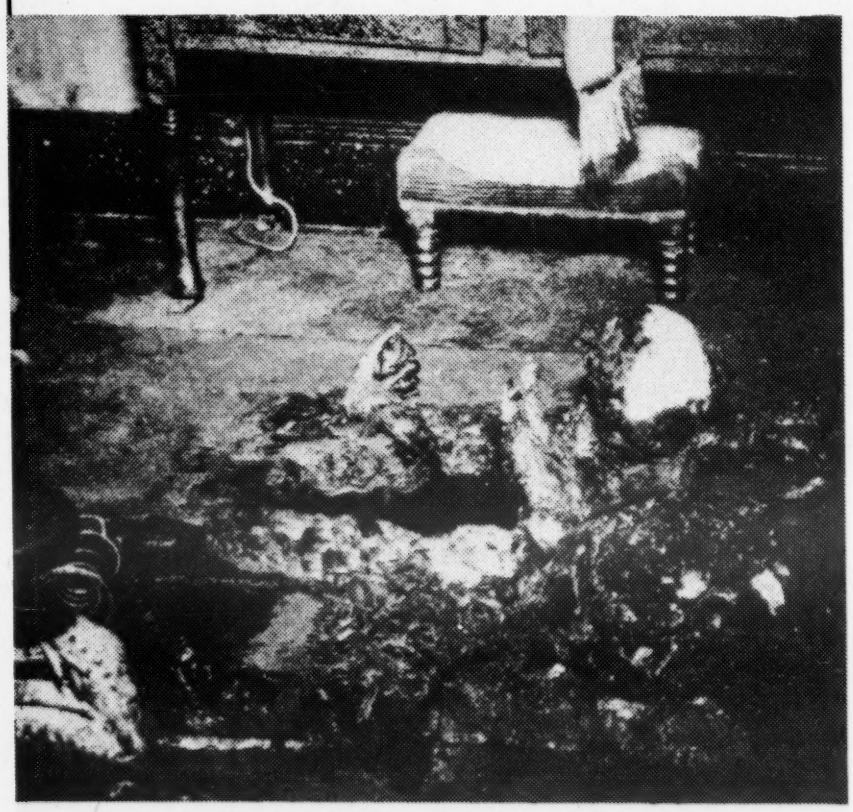
In the event of spontaneous human combustion, the body will fry to a crisp, beginning in the torso and often leaving the limbs intact. This is in contrast to common burns where the limbs are likely to be the first to sear. The burnt body will be reduced to greasy ashes, including the bone. Little around the body at the time, for example flammable clothes or carpet, will be burnt. There is often no evident external source of a flame. Usually, but not always, the victim will be a "no-hoper," an elderly person living alone, or someone in depressed spirits. Often, but not always, the victim is alcoholic. Sometimes it happens to young people, only rarely to children. The singular effect of this phenomenon is the deep internal burning of a body. Human flesh is very difficult to ignite so that it will burn on its own accord like a wooden log. Tremendous temperatures are needed to set tissue on fire, and even crematoriums find it difficult to burn bone. Imagine what it would take to have a T-bone steak disintegrate on a grill.

Not much notice would be paid to these odd incidents were it not for the equally odd phenomenon that articles outside the circles of fire, even by a matter of inches, are left untouched. A person lying in bed might be found as a lump of smelly soot burnt halfway through the mattress, yet the sheets above might not be singed.

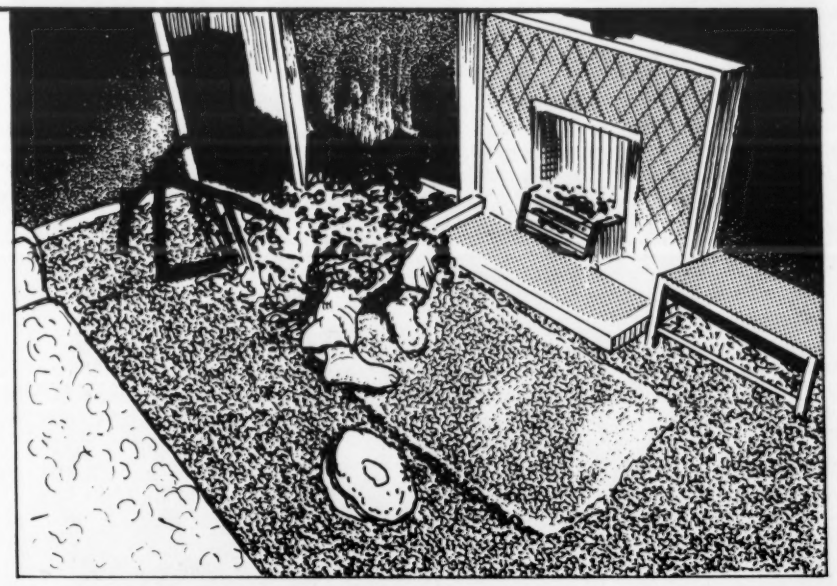
Naturally the people who hunt down these stories and compile them into books can't help speculating on theories. The current favorite says that this selected, intense burning is similiar to what you'd get from a sudden localized microwave burst. It would cook watery (especially alcohol-permeated) flesh without marring cloth. But since an external source of microwaves is no more evident than a source for flames, a shaky logic prevails: Ball lightning is suggested as the culprit, explaining one mystery with another.

I have no reason to believe in spontaneous human combustion other than meager second hand reports and these photographs found in books*. For the moment I'll file them under "unexplained, but not inexplicable." And you?

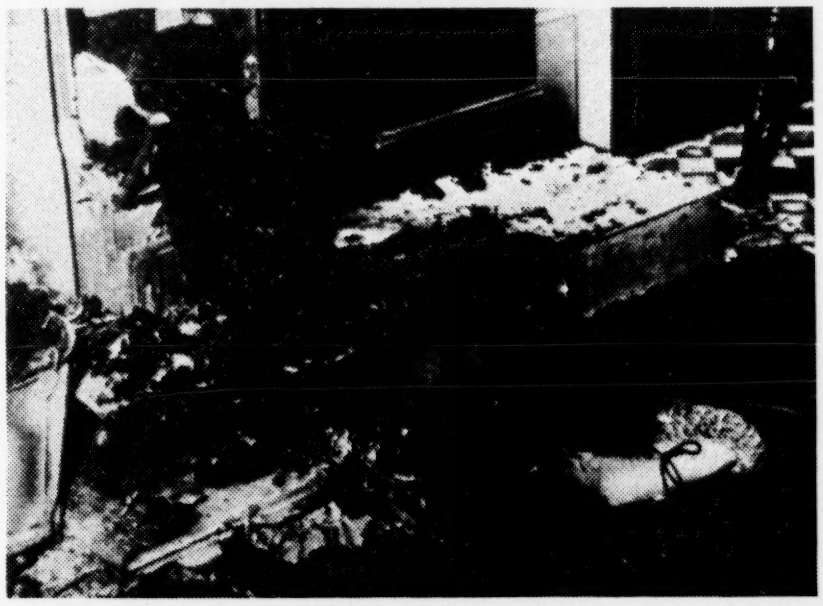
(Left) A fire has reduced most of the body to ashes, leaving only parts of the lower legs, the left hand, and portions of the skull. It was intense enough to burn a hole in the floor, yet little damage was done to the surroundings. (Right) Workmen clear away the remains of Mrs. Mary Reeser, a widow of 67, from St. Petersburg, Florida, who was consumed by fire on July 1, 1951. The overstuffed chair she was sitting on was burned down to its springs, there was a patch of soot on the ceiling above and a small circle of carpet was charred around the chair, but a pile of papers nearby was unscorched. Her skull was shrunk by the intense heat. Dr. Wilton Krogman, a forensic scientist specializing in fire death, joined an investigation by the FBI, but had no explanation, saying " I cannot conceive of such complete cremation without more burning of the apartment itself." (Photos: *When The Impossible Happens)*



CAPTIONS *(from top to bottom):*



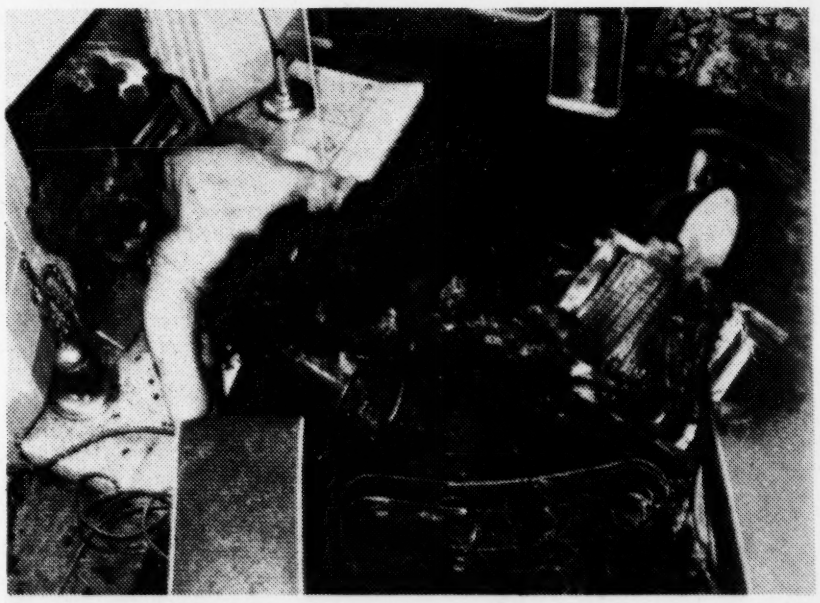
A sketch of the scene of "an unusual death by fire" in Gwent, England, on January 6, 1980. According to John Heymer, a retired Scenes of Crime Officer who was to gather evidence for forensic examination, "On the floor about one meter from the hearth was a pile of ashes. On the perimeter of the ashes, furthest from the hearth, was a partially burnt armchair. Emerging from the ashes were a pair of human feet clothed in socks. The feet were attached to short lengths of lower leg, encased in trouser leg bottoms. The feet and socks were undamaged. Protruding from what was left of the trousers were calcined leg bones which merged into the ashes. The ashes were the incinerated remains of a man. Of the torso and arms nothing remained but ash. Opposite the feet was a blackened skull. Though the rug and carpet below the ashes were charred, the damage did not extend more than a few centimeters beyond the perimeter of the ashes. Less than a meter away, a settee, fitted with loose covers, was not even scorched. Plastic tiles which covered the floor beneath the carpet were undamaged."
(Photo: *New Scientist* 5/15/86)



The charred remains of a "slim lady, 85 years old, in good health." She was totally consumed, except for one of her feet, in November 1963. Very little of her immediate surroundings was burnt. The case was investigated by Dr. D. J. Gee, lecturer in forensic medicine at University of Leeds.
(Photo: *Fire From Heaven*)

An anonymous victim with the apparently unburnt head resting in the fireplace. The lower torso is charred to a residue but the upper part is nearly intact.
(Photo: *When The Impossible Happens*)

(Bottom right) Calcined remains of Mrs. E. M., a widow, aged 69, found dead of "preternatural combustibility" in West London, January 29, 1958. (Photo: *Fire From Heaven*)



(Below, left) Dr. J. Irving Bentley, a retired physician, lived on the ground floor of an apartment in Coudersport, in northern Pennsylvania. On the morning of December 5, 1966, Don Gosnell entered the building's basement to read the meter for the North Penn Gas Company and noticed "a light-blue smoke of unusual odor." Going upstairs he found more strange smoke in Bentley's bedroom, but no sign of Bentley. Peering into the bathroom he discovered a large hole burned through the floor to the basement, exposing the pipework below. On the edge of the hole he saw "a brown leg from the knee down, like that of a mannequin" and then fled.
(Photo: *The Mysterious World*)

* *The most complete report is an out-of-print paperback called* Fire From Heaven *by Michael Harrison (1976, Sidgwick and Jackson, London).*

THE MAN WHO INVENTED FLYING

by John A. Keel

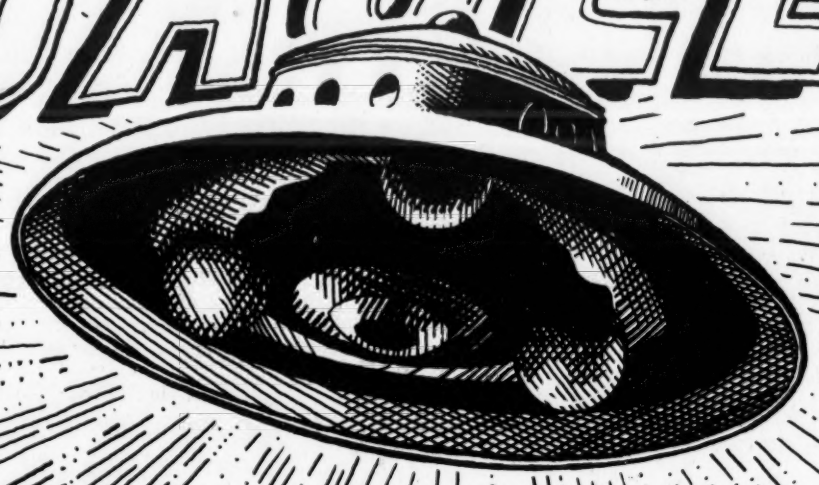
Carl Jung, who wrote a whole book on flying saucers, called UFOs a "living myth," and said of them, "We have here a golden opportunity to see how a legend is formed." The entire epilogue of Jung's book, Flying Saucers: A Modern Myth of Things Seen in the Sky, *is devoted to the discussion of a book published by Ray Palmer, who John Keel here labels "the man who invented flying saucers." With years of experience in the equally colorful dual worlds of pulp magazine publishing and the UFO subculture, John Keel is uniquely qualified to tell this story of the origins of the flying saucer legend that Jung could not have known.* —*Ted Schultz*

This article originally appeared in the *Fortean Times* (see review on page 51).

NORTH AMERICA'S "BIGFOOT" WAS NOTHING more than an Indian legend until a zoologist named Ivan T. Sanderson began collecting contemporary sightings of the creature in the early 1950s, publishing the reports in a series of popular magazine articles. He turned the tall, hairy biped into a household word, just as British author Rupert T. Gould rediscovered sea serpents in the 1930s and, through his radio broadcasts, articles, and books, brought Loch Ness to the attention of the world. Another writer named Vincent Gaddis originated the Bermuda Triangle in his 1965 book, *Invisible Horizons: Strange Mysteries of the Sea.* Sanderson and Charles Berlitz later added to the Triangle lore, and rewriting their books became a cottage industry among hack writers in the United States.

Charles Fort put bread on the table of generations of science fiction writers when, in his 1931 book *Lo!*, he

SAUCERS



Robert Gibson Jones/Harry S. Robins

In 1947, the editor of *Amazing Stories* watched in astonishment as the things he had been fabricating for years in his magazine suddenly came true!

assembled the many reports of objects and people strangely transposed in time and place, and coined the term "teleportation." And it took a politician named Ignatius Donnelly to revive lost Atlantis and turn it into a popular subject (again and again and again)[1].

But the man responsible for the most well-known of all such modern myths — flying saucers — has somehow been forgotten. Before the first flying saucer was sighted in 1947, he suggested the idea to the American public. Then he converted UFO reports from what might have been a Silly Season phenomenon into a *subject*, and kept that subject alive during periods of total public disinterest. His name was Raymond A. Palmer.

Born in 1911, Ray Palmer suffered severe injuries that left him dwarfed in stature and partially crippled. He had a difficult childhood because of his infirmities and, like many isolated young men in those pre-television days, he sought escape in "dime novels," cheap magazines printed on coarse paper and filled with lurid stories churned out by writers who were paid a penny a word. He became an avid science fiction fan, and during the Great Depression of the 1930s he was active in the world of fandom — a world of mimeographed fanzines and heavy correspondence. (Science fiction fandom still exists and is very well organized with well-attended annual conventions and lavishly printed fanzines, some of which are even issued weekly.) In 1930, he sold his first science fiction story, and in 1933 he created the Jules Verne Prize Club which gave out annual awards for the best achievements in sci-fi. A facile writer with a robust imagination, Palmer was able to earn many pennies during the dark days of the Depression, undoubtedly buoyed by his mischievous sense of humor, a fortunate development motivated by his unfortunate physical problems. Pain was his constant companion.

In 1938, the Ziff-Davis Publishing Company in Chicago purchased a dying magazine titled

[1] Donnelly's book, *Atlantis,* published in 1882, set off a 50-year wave of Atlantean hysteria around the world. Even the characters who materialized at seances during that period claimed to be Atlanteans.

Richard Toronto/Shavertron

Richard Shaver (left), inventor of the Shaver Mystery, and Ray Palmer (right), the man who invented flying saucers, enjoy a friendly game of chess sometime in the 1950s.

Amazing Stories. It had been created in 1929 by the inestimable Hugo Gernsback, who is generally acknowledged as the father of modern science fiction. Gernsback, an electrical engineer, ran a small publishing empire of magazines dealing with radio and technical subjects. (He also founded *Sexology*, a magazine of soft-core pornography disguised as science, which enjoyed great success in a somewhat conservative era.) It was his practice to sell — or even give away — a magazine when its circulation began to slip. Although *Amazing Stories* was one of the first of its kind, its readership was down to a mere 25,000 when Gernsback unloaded it on Ziff-Davis. William B. Ziff decided to hand the editorial reins to the young science fiction buff from Milwaukee, Wisconsin. At the age of 28, Palmer found his life's work.

Expanding the pulp magazine to 200 pages (and as many as 250 pages in some issues), Palmer deliberately tailored it to the tastes of teenaged boys. He filled it with nonfiction features and filler items on science and pseudo-science in addition to the usual formula short stories of BEMs (Bug-Eyed Monsters) and beauteous maidens in distress. Many of the stories were written by Palmer himself under a variety of pseudonyms such as Festus Pragnell and Thorton Ayre, enabling him to supplement his meager salary by paying himself the usual penny-a-word. His old cronies from fandom also contributed stories to the magazine with a zeal that far surpassed their talents. In fact, of the dozen or so science fiction magazines then being sold on the newsstands, *Amazing Stories* easily ranks as the very worst of the lot. Its competitors, such as *Startling Stories, Thrilling Wonder Stories, Planet Stories* and the venerable *Astounding* (now renamed *Analog*) employed skilled, experienced professional writers like Ray Bradbury, Isaac Asimov, and L. Ron Hubbard (who later created Dianetics and founded Scientology). *Amazing Stories* was garbage in comparison and hardcore sci-fi fans tended to sneer at it.[2]

The magazine might have limped through the 1940s, largely ignored by everyone, if not for a single incident. Howard Browne, a television writer who served as Palmer's associate editor in those days, recalls: "Early in the 1940s, a letter came to us from Dick Shaver purporting to reveal the "truth" about a race of freaks, called "Deros," living under the surface of the earth. Ray Palmer read it, handed it to me for comment. I read a third of it, tossed it in the waste basket. Ray, who loved to show his editors a trick or two about the business, fished it out of the basket, ran it in *Amazing*, and a flood of mail poured in from readers who insisted every word of it was true because *they'd* been plagued by Deros for years."[3]

Actually, Palmer had accidently tapped a huge, previously unrecognized audience. Nearly every community has at least one person who complains constantly to the local police that someone — usually a neighbor — is aiming a terrible ray gun at their house or apartment. This ray, they claim, is ruining their health, causing their plants to die, turning their bread moldy, making their hair and teeth fall out, and broadcasting voices into their heads. Psychiatrists are very familiar with these "ray" victims and relate the problem with paranoid-schizophrenia. For the most part, these paranoiacs are harmless and usually elderly. Occasionally, however, the voices they hear urge them to perform destructive acts, particularly arson. They are a distrustful lot, loners by nature, and very suspicious of everyone, including the government and all figures of authority. In earlier times, they thought they were hearing the voice of God and/or the Devil. Today they often blame the CIA or space beings for their woes. They naturally gravitate to eccentric causes and organizations which reflect their own fears and insecurities, advocating bizarre political philosophies and reinforcing their peculiar belief systems. Ray Palmer unintentionally

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[2] The author was an active sci-fan in the 1940s and published a fanzine called *Lunarite.* Here's a quote from *Lunarite* dated October 26, 1946: *"Amazing Stories* is still trying to convince everyone that the BEMs in the caves run the world. And I was blaming it on the Democrats. 'Great Gods and Little Termites' was the best tale in this ish [issue]. But Shaver, author of the 'Land of Kui,' ought to give up writing. He's lousy. And the editors of *AS* ought to join Sgt. Saturn on the wagon and quit drinking that Xeno or the BEMs in the caves will get them."

I clearly remember the controversy created by the Shaver Mystery and the great disdain with which the hardcore fans viewed it.

[3] From *Cheap Thrills: An Informal History of the Pulp Magazines* by Ron Goulart (published by Arlington House, New York, 1972).

gave thousands of these people focus to their lives.

Shaver's long, rambling letter claimed that while he was welding[4] he heard voices which explained to him how the underground Deros were controlling life on the surface of the earth through the use of fiendish rays. Palmer rewrote the letter, making a novelette out of it, and it was published in the March 1945 issue under the title: "I Remember Lemuria . . . by Richard Shaver."

The Shaver Mystery was born.

Somehow the news of Shaver's discovery quickly spread beyond science fiction circles and people who had never before bought a pulp magazine were rushing to their local newsstands. The demand for *Amazing Stories* far exceeded the supply and Ziff-Davis had to divert paper supplies (remember there were still wartime shortages) from other magazines so they could increase the press run of *AS*.

"Palmer traveled to Pennsylvania to talk to Shaver," Howard Brown later recalled, "found him sitting on reams of stuff he'd written about the Deros, bought every bit of it and contracted for more. I thought it was the sickest crap I'd run into. Palmer ran it and doubled the circulation of *Amazing* within four months."

By the end of 1945, *Amazing Stories* was selling 250,000 copies per month, an amazing circulation for a science fiction pulp magazine. Palmer sat up late at night, rewriting Shaver's material and writing other short stories about the Deros under pseudonyms. Thousands of letters poured into the office. Many of them offered supporting "evidence" for the Shaver stories, describing strange objects they had seen in the sky and strange encounters they had had with alien beings. It seemed that many thousands of people were aware of the existence of some distinctly nonterrestrial group in our midst. Paranoid fantasies were mixed with tales that had the uncomfortable ring of truth. The "Letters-to-the-Editor" section was the most interesting part of the publication. Here is a typical contribution from the issue for June 1946:

Sirs:

I flew my last combat mission on May 26 [1945] when I was shot up over Bassein and ditched my ship in Ramaree Roads off Chedubs Island. I was missing five days. I requested leave at Kashmere (sic). I and Capt. (deleted by request) left Srinagar and went to Rudok then through the Khese pass to the northern foothills of the Karakoram. We found what we were looking for. We knew what we were searching for.

For heaven's sake, drop the whole thing! You are playing with dynamite. My companion and I fought our way out of a cave with submachine guns. I have two 9" scars on my left arm that came from wounds given me in the cave when I was 50 feet from a moving object of any kind and in perfect silence. The muscles were nearly ripped out. How? I don't know. My friend has a hole the size of a dime in his right bicep. It was seared inside. How we don't know. But we both believe we know more about the Shaver Mystery than any other pair.

You can imagine my fright when I picked up my first copy of *Amazing Stories* and see you splashing words about on the subject.

The identity of the author of this letter was withheld by request. Later Palmer revealed his name: Fred Lee Crisman. He had inadvertently described the effects of a laser beam — even though the laser wasn't invented until years later. Apparently Crisman was obsessed with Deros and death rays long before Kenneth Arnold sighted the "first" UFO in June 1947.

Ray Palmer edited this September 1946 *Amazing Stories* that contained an article about a "circle-winged plane."

[4] It is interesting that so many victims of this type of phenomenon were welding or operating electrical equipment such as radios, radar, etc. when they began to hear voices.

The illustration for an article from the September 1948 *Fantastic Stories* about a Russian peasant who had been "burned by a ray from a ship from another world."

In September 1946, *Amazing Stories* published a short article by W.C. Hefferlin, "Circle-Winged Plane," describing experiments with a circular craft in 1927 in San Francisco. Shaver's (Palmer's) contribution to that issue was a 30,000 word novelette, "Earth Slaves to Space," dealing with spaceships that regularly visited the Earth to kidnap humans and haul them away to some other planet. Other stories described amnesia, an important element in the UFO reports that still lay far in the future, and mysterious men who supposedly served as agents for those unfriendly Deros.

A letter from army lieutenant Ellis L. Lyon in the September 1946 issue expressed concern over the psychological impact of the Shaver Mystery.

> What I am worried about is that there are a few, and perhaps quite a large number of readers who may accept this Shaver Mystery as being founded on fact, even as Orson Welles put across his invasion from Mars, via radio some years ago. It is, of course, impossible for the reader to sift out in your "Discussions" and "Reader Comment" features, which are actually letters from readers and which are credited to an *Amazing Stories* staff writer, whipped up to keep alive interest in your fictional theories. However, if the letters are generally the work of the readers, it is distressing to see the reaction you have caused in their muddled brains. I refer to the letters from people who have "seen" the exhaust trails of rocket ships or "felt" the influence of radiations from underground sources.

Palmer assigned artists to make sketches of objects described by readers and disc-shaped flying machines appeared on the covers of his magazine long before June 1947. So we can note that a considerable number of people — millions — were exposed to the flying saucer concept before the national news media was even aware of it. Anyone who glanced at the magazines on a newsstand and caught a glimpse of the saucers-adorned *Amazing Stories* cover had the image implanted in his subconscious. In the course of the two years between March 1945 and June 1947, *millions* of Americans had seen at least one issue of *Amazing Stories* and were aware of the Shaver Mystery with all of its bewildering implications. Many of these people were out studying the empty skies in the hopes that they, like other *Amazing Stories* readers, might glimpse something wondrous. World War II was over and some new excitement was needed. Raymond Palmer was supplying it — much to the alarm of Lt. Lyon and Fred Crisman.

side from Palmer's readers, two other groups were ready to serve as cadre for the believers. About 1,500 members of Tiffany Thayer's Fortean Society knew that weird aerial objects had been sighted throughout history and some of them were convinced that this planet was under surveillance by beings from another world. Tiffany Thayer was rigidly opposed to Franklin Roosevelt and loudly proclaimed that almost everything was a government conspiracy, so his Forteans were fully prepared to find new conspiracies hidden in the forthcoming UFO mystery. They would become instant experts, willing to educate the press and the public when the time came. The second group were spiritualists and students of the occult, headed by Dr. Meade Layne, who had been chatting with the space people at seances through trance mediums and Ouija boards. They knew the space ships were coming and were hardly surprised when "ghost rockets" were reported over Europe in 1946.[5] Combined, these three groups represented a formidable segment of the population.

On June 24, 1947, Kenneth Arnold made his famous sighting of a group of "flying saucers" over Mt. Rainier, and in Chicago Ray Palmer watched in astonishment as the newspaper clippings poured in from every state. The things that he had been fabricating for his magazine were suddenly coming true!

For two weeks, the newspapers were filled with UFO reports. Then they tapered off and the Forteans howled "Censorship!" and "Conspiracy!" But dozens of magazine writers were busy compiling articles on this new subject and their pieces would appear steadily during the next year. One man, who had earned his living

[5] The widespread "ghost rockets" of 1946 received little notice in the U.S. press. I remember carrying a tiny clipping around in my wallet describing mysterious rockets weaving through the mountains of Switzerland. But that was the only "ghost rocket" report that reached me that year.

writing stories for the pulp magazines in the 1930s, saw the situation as a chance to break into the "slicks" (better quality magazines printed on glossy or "slick" paper). Although he was 44 years old at the time of Pearl Harbor, he served as a Captain in the marines until he was in a plane accident. Discharged as Major (it was the practice to promote officers one grade when they retired), he was trying to resume his writing career when Ralph Daigh, an editor at *True* magazine, assigned him to investigate the flying saucer enigma. Thus, at the age of 50, Donald E. Keyhoe entered Never-Never-Land. His article, "Flying Saucers Are Real," would cause a sensation, and Keyhoe would become an instant UFO personality.

That same year, Palmer decided to put out an all-flying saucer issue of *Amazing Stories*. Instead, the publisher demanded that he drop the whole subject after, according to Palmer, two men in Air Force uniforms visited him. Palmer decided to publish a magazine of his own. Enlisting the aid of Curtis Fuller, editor of a flying magazine, and a few other friends, he put out the first issue of *Fate* in the spring of 1948. A digest-sized magazine printed on the cheapest paper, *Fate* was as poorly edited as *Amazing Stories* and had no impact on the reading public. But it was the only newsstand periodical that carried UFO reports in every issue. The *Amazing Stories* readership supported the early issues wholeheartedly.

In the fall of 1948, the first flying saucer convention was held at the Labor Temple on 14th Street in New York City. Attended by about thirty people, most of whom were clutching the latest issue of *Fate,* the meeting quickly dissolved into a shouting match[6]. Although the flying saucer mystery was only a year old, the side issues of government conspiracy and censorship already dominated the situation because of their strong emotional appeal. The U.S. Air Force had been sullenly silent throughout 1948 while, unbeknownst to the UFO advocates, the boys at Wright-Patterson Air Force Base in Ohio were making a sincere effort to untangle the mystery.

When the Air Force investigation failed to turn up any tangible evidence (even though the investigators accepted the extraterrestrial theory) General Hoyt Vandenburg, Chief of the Air Force and former head of the CIA, ordered a negative report to release to the public. The result was Project Grudge, hundreds of pages of irrelevant nonsense that was unveiled around the time *True* magazine printed Keyhoe's pro-UFO article. Keyhoe took this personally, even though his article was largely

Ray Palmer edited these issues of *Amazing* and *Fantastic* from the 1940s.

[6] I attended this meeting but my memory of it is vague after so many years. I cannot recall who sponsored it.

Flying saucer books from the early 1950s, including Donald Keyhoe's first book, *The Flying Saucers Are Real*, published in 1950.

a rehash of Fort's books, and Ralph Daigh had decided to go with the extraterrestrial hypothesis because it seemed to be the most commercially acceptable theory (that is, it would sell magazines).

Palmer's relationship with Ziff-Davis was strained now that he was publishing his own magazine. "When I took over from Palmer, in 1949," Howard Browne said, "I put an abrupt end to the Shaver Mystery — writing off over 7,000 dollars worth of scripts."

Moving to Amherst, Wisconsin, Palmer set up his own printing plant and eventually he printed many of those Shaver stories in his *Hidden World* series. As it turned out, postwar inflation and the advent of television was killing the pulp magazine market anyway. In the fall of 1949, hundreds of pulps suddenly ceased publication, putting thousands of writers and editors out of work. *Amazing Stories* has often changed hands since but is still being published, and is still paying its writers a penny a word.[7]

For some reason known only to himself, Palmer chose not to use his name in *Fate.* Instead, a fictitious "Robert N. Webster" was listed as editor for many years. Palmer established another magazine, *Search,* to compete with *Fate. Search* became a catch-all for inane letters and occult articles that failed to meet *Fate's* low standards.

Although there was a brief revival of public and press interest in flying saucers following the great wave of the summer of 1952, the subject largely remained in the hands of cultists, cranks, teenagers, and housewives who reproduced newspaper clippings in little mimeographed journals and looked up to Palmer as their fearless leader.

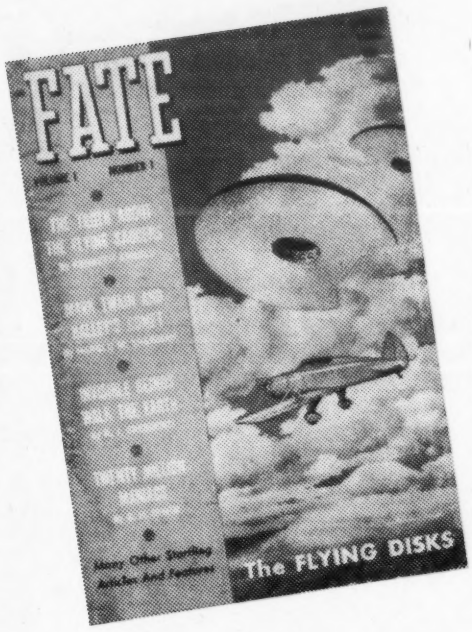
In June, 1956, a major four-day symposium on UFOs was held in Washington, D.C. It was unquestionably the most important UFO affair of the 1950s and was attended by leading military men, government officials and industrialists. Men like William Lear, inventor of the Lear Jet, and assorted generals, admirals and former CIA heads freely discussed the UFO "problem" with the press. Notably absent were Ray Palmer and Donald Keyhoe. One of the results of the meetings was the founding of the National Investigation Committee on Aerial Phenomena (NICAP) by a physicist named Townsend Brown. Although the symposium received extensive press coverage at the time, it was subsequently censored out of UFO history by the UFO cultists themselves — primarily because they had not participated in it.[8]

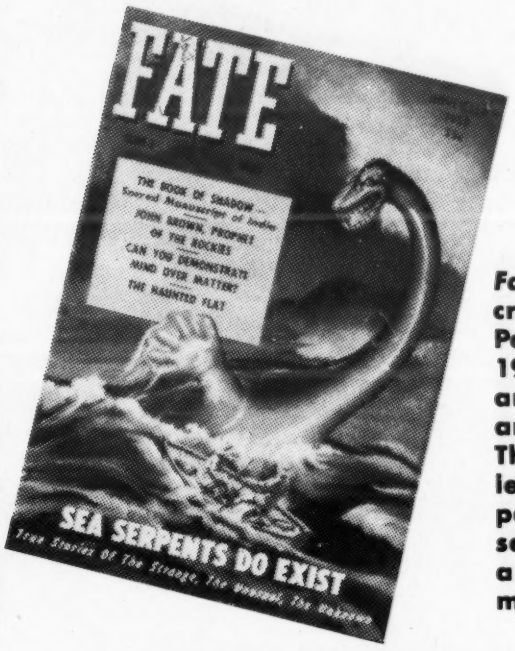
The American public was aware of only two flying saucer personalities, contactee George Adamski, a lovable rogue with a talent for obtaining publicity, and Donald Keyhoe, a zealot who howled "Coverup!" and was locked in mortal combat with Adamski for newspaper coverage. Since Adamski was the more colorful (he had ridden a saucer to the moon), he was usually awarded more attention. The press gave him the title of "astronomer" (he lived in a house on Mount Palomar where a great telescope was in operation), while Keyhoe attacked him as "the operator of a hamburger stand." Ray Palmer tried to remain aloof of the warring factions, so, naturally, some of them turned against him.

The year 1957 was marked by several significant developments. There was another major flying saucer wave. Townsend Brown's NICAP floun-

[7] A few of the surviving science fiction magazines now pay (gasp!) three cents a word. But writing sci-fi still remains a sure way to starve to death.

[8] When David Michael Jacobs wrote *The UFO Controversy in America,* a book generally regarded as the most complete history of the UFO maze, he chose to completely revise the history of the 1940s and 50s, carefully excising any mention of Palmer, the 1956 symposium, and many of the other important developments during that period.





Fate magazine was created by Ray Palmer in Spring 1948 as a vehicle for articles on the occult and the unexplained. The first issue (far left) devoted 44 pages to flying saucers, at that time a topic only a few months old.

dered and Keyhoe took it over. And Ray Palmer launched a new newsstand publication called *Flying Saucers From Other Worlds.* In the early issues he hinted that he knew some important "secret." After tantalizing his readers for months, he finally revealed that UFOs came from the center of the earth and the phrase *From Other Worlds* was dropped from the title. His readers were variously enthralled, appalled, and galled by the revelation.

For seven years, from 1957 to 1964, ufology in the United States was in total limbo. This was the Dark Age. Keyhoe and NICAP were buried in Washington, vainly tilting at windmills and trying to initiate a congressional investigation into the UFO situation.

A few hundred UFO believers clustered around Coral Lorenzen's Aerial Phenomena Research Organization (APRO). And about 2,000 teenagers bought *Flying Saucers* from newsstands each month. Palmer devoted much space to UFO clubs, information exchanges, and letters-to-the-editor. So it was Palmer, and Palmer alone, who kept the subject alive during the Dark Age and lured new youngsters into ufology. He published his strange books about Deros, and ran a mail-order business selling the UFO books that had been published after the various waves of the 1950s. His partners in the *Fate* venture bought him out, so he was able to devote his full time to his UFO enterprises.

Palmer had set up a system similar to sci-fi fandom, but with himself as the nucleus. He had come a long way since his early days and the Jules Verne Prize Club. He had been instrumental in inventing a whole system of belief, a frame of reference — the magical world of Shaverism and flying saucers — and he had set himself up as the king of that world. Once the belief system had been set up it became self-perpetuating. The people beleaguered by mysterious rays were joined by the wishful thinkers who hoped that living, compassionate beings existed out there beyond the stars. They didn't need any real evidence. The belief itself was enough to sustain them.

When a massive new UFO wave — the biggest one in U.S. history — struck in 1964 and continued unabated until 1968, APRO and NICAP were caught unawares and unprepared to deal with renewed public interest. Palmer increased the press run of *Flying Saucers* and reached out to a new audience. Then, in the 1970s, a new Dark Age began. October 1973 produced a flurry of well-publicized reports and then the doldrums set in. NICAP strangled in its own confusion and dissolved in a puddle of apathy, along with scores of lesser UFO organizations. Donald Keyhoe, a very elder statesman, lives in seclusion in Virginia. Most of the hopeful contactees and UFO investigators of the 1940s and 50s have passed away. Palmer's *Flying Saucers* quietly self-destructed in 1975, but he continued with *Search* until his death in the summer of 1977. Richard Shaver is gone but the Shaver Mystery still has a few adherents. Yet the sad truth is that none of this might have come about if Howard Browne hadn't scoffed at that letter in that dingy editorial office in that faraway city so long ago. ■

Following Ray Palmer's death, his wife Marjorie managed Palmer Publications until a few years ago, when she sold the business. The new owners carry on, still publishing Search *and* Space World *magazines, as well as books about the Shaver Mystery, UFOs, and the paranormal. Their address is Palmer Publications, P. O. Box 296, Amherst, WI 54406. Meanwhile, the Shaver Mystery tradition endures in the '80s in the form of a little magazine called* Shavertron, *P. O. Box 248, Vallejo, CA 94590* (see review, p. 77).

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IN ADVANCE OF THE LANDING

FOLK CONCEPTS OF OUTER SPACE

Project Starlight International, a research complex of lights, radio, and laser gear for signaling UFOs, constructed by the Association for the Understanding of Man near Austin, Texas.

by Douglas Curran

Since its inception, described in the preceding article, the flying saucer mythos has diversified into myriad variations. We present here an excerpt from an extraordinary book that provides an intimate look into this world, described with compassionate insight by author/photographer Douglas Curran. (In Advance of the Landing *may be obtained for $16.95 from Abbeville Press, 505 Park Avenue, New York, NY 10022.)*

—Ted Schultz

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In the fall of 1977 I bought a second-hand yellow Renault 16. I christened it "Giselle," pulled out the rear seat, and fitted a small cupboard-desk in the space behind the driver's seat. The passenger seat folded down into a bed at night, and with the glove compartment open I was able to find room for my feet. With more a hunch than a plan, I began driving, looking for objects that people might have made to express their ideas about outer space and the future. I followed secondary highways through towns and cities, from British Columbia down the West Coast, eventually circumscribing the United States along a counterclockwise route. Three months and 22,000 miles later, I arrived in Toronto with a rough collection of negatives that became the basis of this book.

By the fall of 1978 I was on the road again, better equipped with a 4 x 5 camera and an emerging awareness of a new mythology of gods and technology as relevant to twentieth-century civilization as Zeus and Apollo had been to the ancient Greeks. Giselle was my home for months at a time for several years. I might wake up in Ontario one morning and not shut the engine off until Kansas, on my way to a flying-saucer convention. I lost track of the miles. One day the speedometer needle fell off, and I was delighted to see the end of its nagging.

Initially I sought information

O. T. Nodrog sells avocado plants, wheat berries, and honey every Saturday morning at the Weslaco, Texas, flea market. He is also the leader of a small group at the Armageddon Time Ark Base, channelling messages from the Outer Dimensional Forces. Basing their beliefs on the Bible, Nodrog and his followers predict an apocalyptic S-Day, when Yahweh will activate the Sixth Seal of Revelations, and Time Ark Service Modules (fifth-dimensional starships) will rescue only those who have undergone their Survival Training to start the post-apocalyptic Manasseh Free Territory.

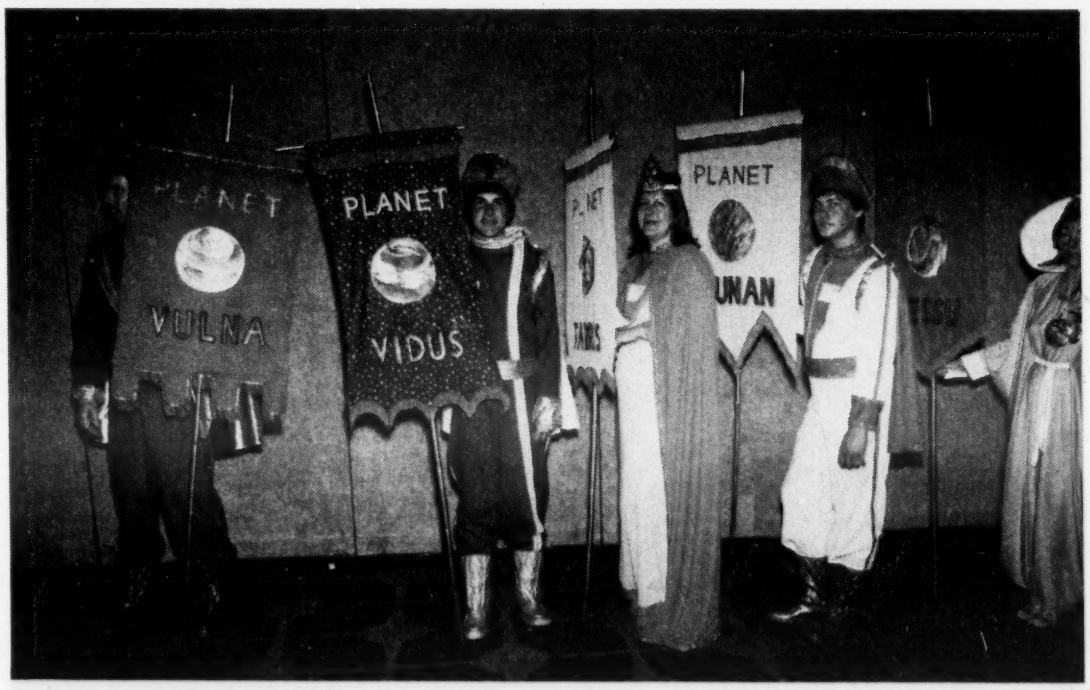
about backyard rockets and flying saucers from newspaper editors, waitresses, and gas station attendants in the towns and cities I drove through. I would fan out postcards made from some photographs taken during my first trip and say: "I'm studying what people think about outer space. Have you seen anything around here that looks like this?" Many times the discussion that followed would involve the whole newsroom or cafe in a debate over the possibilities of life on other planets and alien visitations to Earth. Eventually much information for the project was to come from an expanding circle of UFO researchers, science fiction buffs, and sociologists, but luck and driving — the turn of the steering wheel like a roll of the dice — uncovered more than any single researcher.

* * *

On my travels across the continent I never had to wait too long for someone to tell me about his or her UFO experience, whether I was chatting with a farmer in Kansas, Ruth Norman at the Unarius Foundation, or a cafe owner in Florida. What continually struck me in talking with these people was how positive and ultimately life-giving a force was their belief in outer space. Their belief reaffirmed the essential fact of human existence: the need for order and hope. It is this that establishes them — and me — in the continuity of human experience. It brought me to a greater understanding of Oscar Wilde's observation, "We are all lying in the gutter — but some of us are looking at the stars."

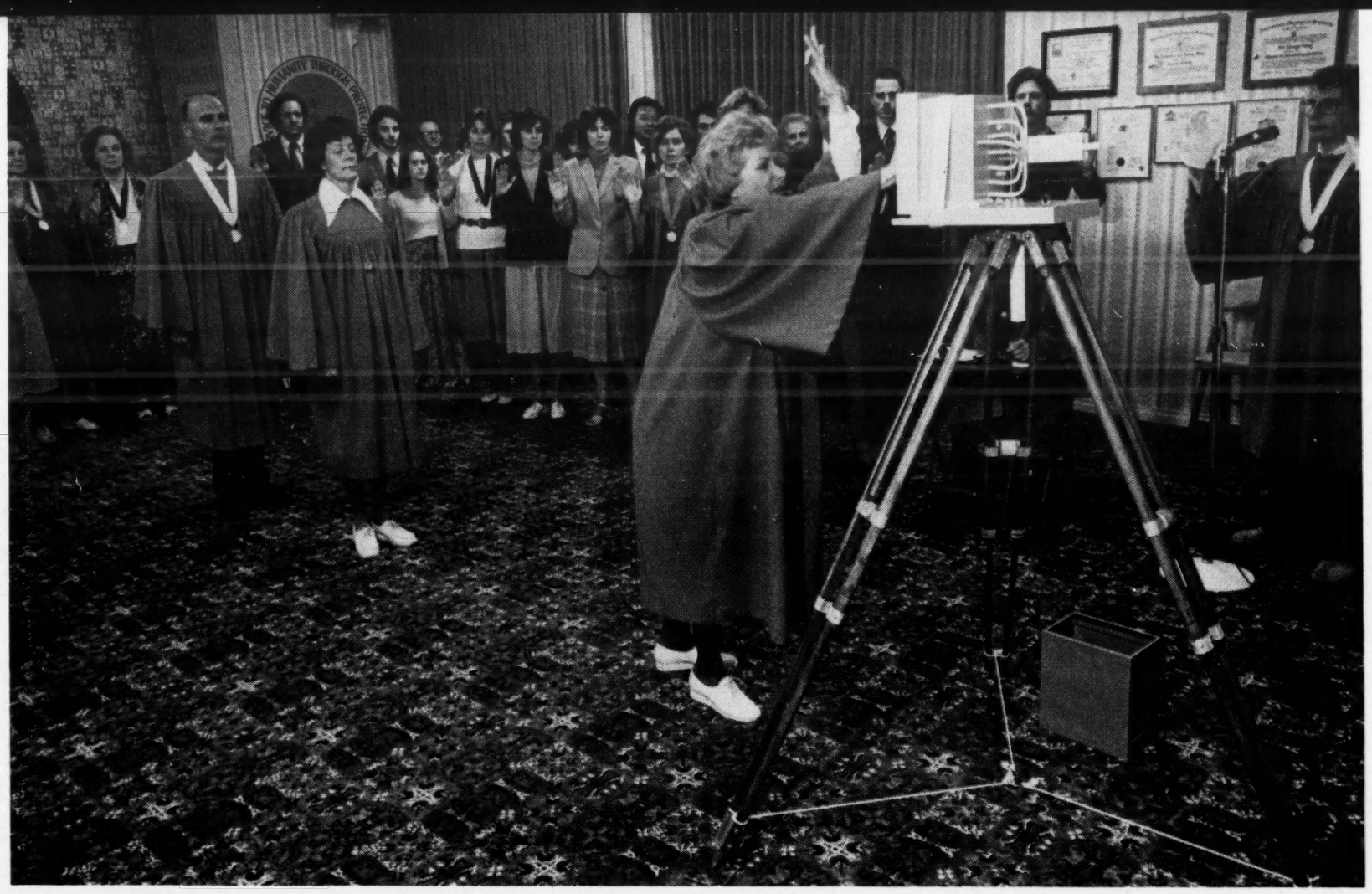
The second annual Unariun Conclave of Light, held in San Diego, California, in May 1981, drew over 400 members from as far away as Milwaukee, Toronto, and New York. Like the Warfield brothers, Brian and Mike (above), and the Bond family (below), everyone dresses in costumes from their past lives on other planets. Kenneth Bond, a successful businessman, and his wife Birgit, are bringing up their sons Derek and Stephen according to Unariun concepts.

The Unarius Foundation presents members with a complete and ordered cosmography. Earth, they believe, is "the garbage dump of the universe," the place where unfulfilled souls end up until they achieve enough of a karmic bank balance to bail themselves out. Our planet operates at such a low level of consciousness that it even **vibrates** at a low frequency. To raise that consciousness, to increase that frequency, is the goal of the Unariuns. Such a move, they believe, would send a cosmic "yes" to the Intergalactic Confederation. Thirty-two spaceships — one from each planet of the Intergalactic Confederation — would then "land on Planet Earth to help this rapidly dying world . . . to teach mankind a better, a higher and happier way of life. . . ."



The power for such an ambitious endeavor comes from Ruth Norman, an eighty-two-year-old widow living in El Cajon, California (see back cover). Unariuns know her as the Archangel Uriel, the present incarnation of a supreme spiritual being who has visited Earth many times before.

The acknowledgment of amassed guilt from past lives is the first part of the healing-enlightenment process. These explorations of the past tend to revolve around Uriel. A student might come to a reading session, as one related to me, and reveal, "I had a



Members of the Aetherius Society charge a spiritual battery during a prayer session in Hollywood, California. The battery is just one of the radionic inventions of Aetherius founder George King, who communicates with Cosmic Masters from many planets. The prayer sessions are part of his larger plan for harnessing and directing healing psychic energies throughout the world.

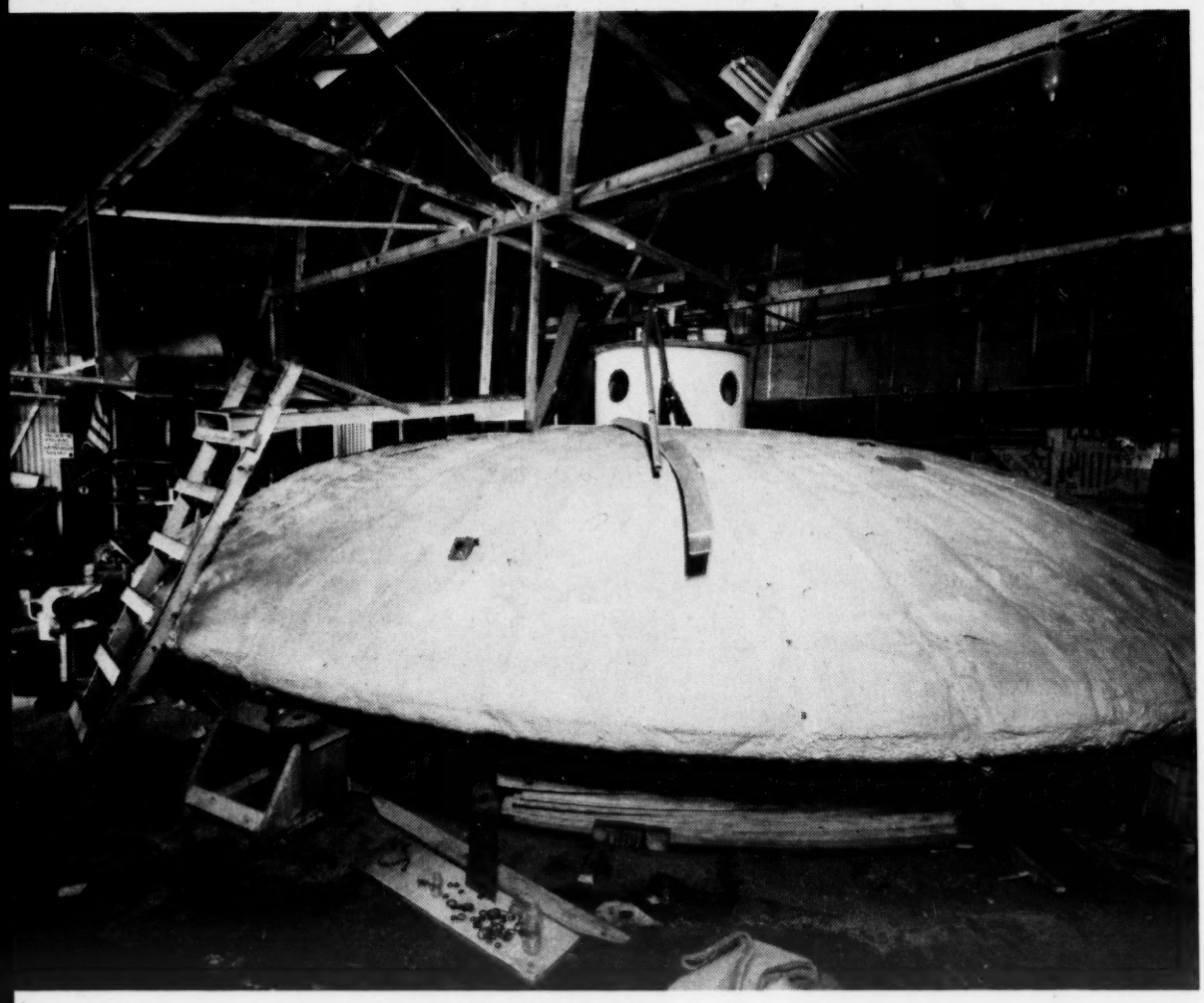
dream, a realization of my life on the planet Deva where I committed a terrible atrocity. I was a usurper of power. When the king came with Uriel to watch the pageant I blew up the stadium, not realizing in my ignorance that I couldn't truly kill Uriel." After group discussion of such a revelation, one of the senior teachers will correct any points that do not fit in with Unariun cosmological history. The past-life negation is then expunged, and the student is lifted to "a more regenerative position in his scale of life," moving toward that "psychic polarization and oscillation directed by the Perfected Minds on Higher Frequency Worlds." After one session, I watched strong men break into tears as they realized what they had done to Uriel in past lives and how kind she was just to let them appear in her presence now.

The Spiritual Battery, covered with a cloth and mounted on a surveyor's tripod, is the focal point of the room. A choir-robed member sits at a folding camp table to one side. With stopwatch in hand, the time-keeper transcribes into a ledger the precise number of participants and the minutes of prayer energy focused into the battery. Batlike in his robes, with white-gloved hands stretched above his head, Dr. Charles Abrahamson, a senior member of the Aetherius Society, holds a silent count-down to the stroke of 7:30. At that exact moment Abrahamson sweeps his arms downward and the group of 45 charges into the Holy Mantra, "Om mani padme hum . . . OM mani padme Hum . . . OM mani padme HUM." Abrahamson exhorts the group into a rapid, emphatic chant. "Deeper, deeper!" he commands. The response, though spirited, never reaches a level of euphoric rapture. Rather, like most of Aetherius's workings, it remains efficient, almost military in its precision.

Once the group is rolling well with the mantra, the specially trained Prayer Team advances in single file toward the battery.

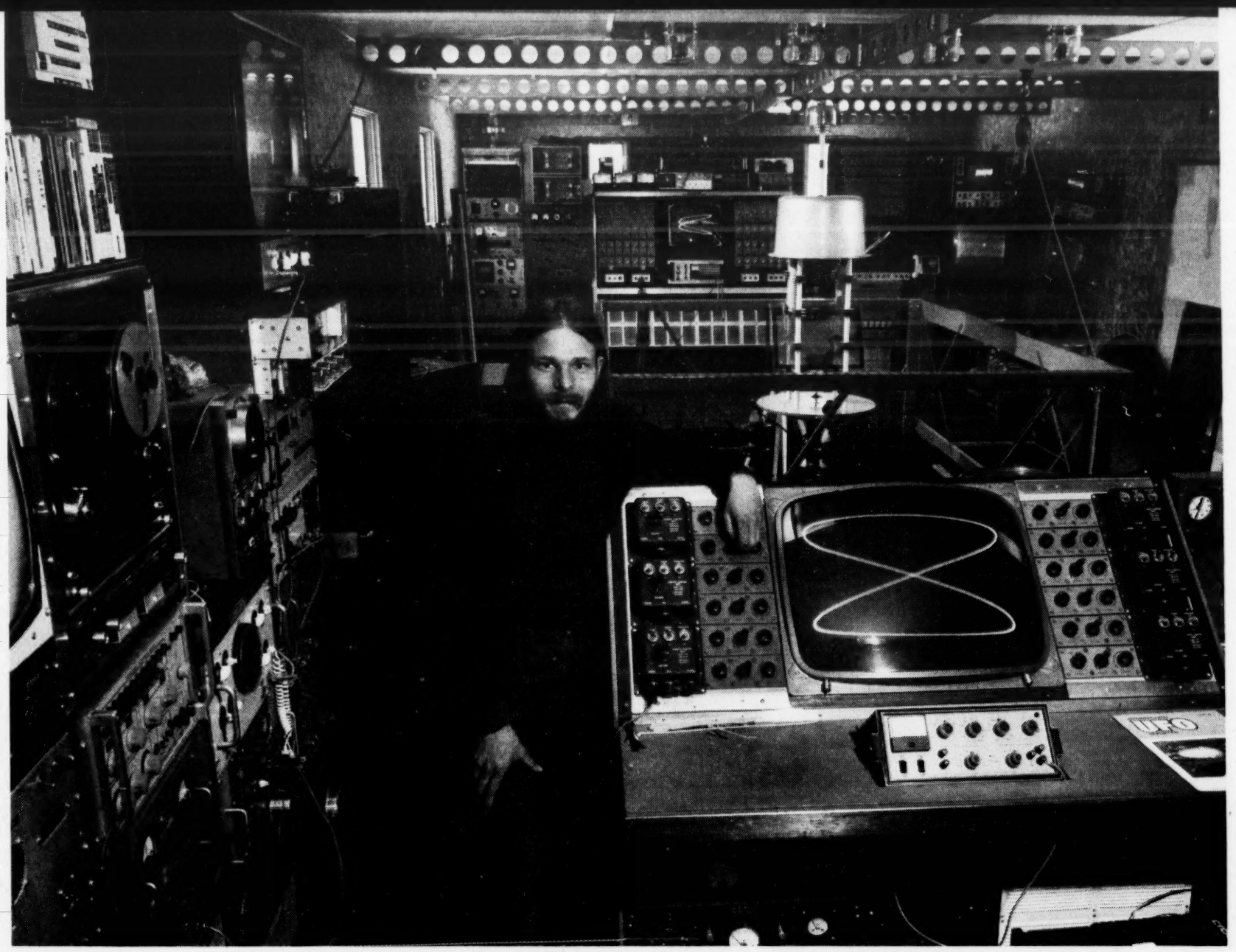
The lead team member proceeds alone to within a few feet of the battery and recites the first of the Twelve Blessings. The Prayer Team continues to recite the Twelve Blessings in turn throughout the second and third cycles of the evening.

The Spiritual Battery, nearing its full-charge capacity of 700 prayer-hours, is carefully capped and taken to safe storage. As the battery and its escort make their way through the crowded room, the members cautiously fall back from it. It is felt that with so much power stored in the battery, an inadvertant mishap could have devastating results for life, limb, and karma. Aetherius founder George King maintains that the specialized radionics equipment he has developed is capable of storing this spiritual energy for up to 10,000 years, to be released as needed. Several batteries are kept permanently charged, ready to forestall world crises.



(Top) Charles Gaiffe, a retired screw-machine operator and machinist, holds a mold for the propulsion unit of the Bluebird flying saucer, housed in a barn in Detour Village, Michigan. (Bottom) named after a Hopi Indian legend, the Bluebird is 35 feet in diameter and incorporates a three-foot planetary gear transmission valued at $100,000.

Whenever I travel east I make a point of stopping in to see Charles. Peering through the window of his shop out behind his house, I might find him sitting in a wired-together swivel chair, contemplating a machine part, or hunched over the lathe with curls of copper splitting off a new turning. For Charles, the motor, the purpose of his life, and God's will are inextricably tied together. He believes that guardian angels watch over him and that God keeps him alive as long as he works on the motor. The more complex parts of his invention are still made for him in the shops of old friends who long ago deserted the dream of the Bluebird.



In Bellaire, Michigan, John Shepherd has converted his grandparents' home into a UFO-detecting station.

John Shepherd is trying to contact extraterrestrial life. For years now, each morning at ten he has begun broadcasting music and binary signals from Earth Station Radio. The music and signals pulse from a home-built 20-foot transmitter accelerator assembly sunk into the bowels of his facility.

John's station has been in operation for nearly 11 years, constantly changing and growing in sophistication. In a black pit in the center of the room are sunk large hydro transformers scrounged from the local power utility, looped and crossed by heavy cables. Rising out of this well is the accelerator tower, a structure reminiscent of an Edison experiment. Plates and grids bracketed with insulators set up a fierce buzzing as the signal charge crosses over them in a fan of blue arcs into the antennae. The saturated magnetic field ionizes the air, leaving the smell of ozone as after a lightning storm.

Underfoot and along the baseboards run cable bundles the thickness of a man's arm, while overhead hang service boards and modules mounted with UV meters, phase loop converters, signal-strength indicators, manometers, voltmeters, pulse shapers, pulse-shape monitors, potentiometers, switches, patch cords, ICs, LEDs, and ready lights. All of it alive and talking to itself and someone or something, immeasurable miles and galaxies away.

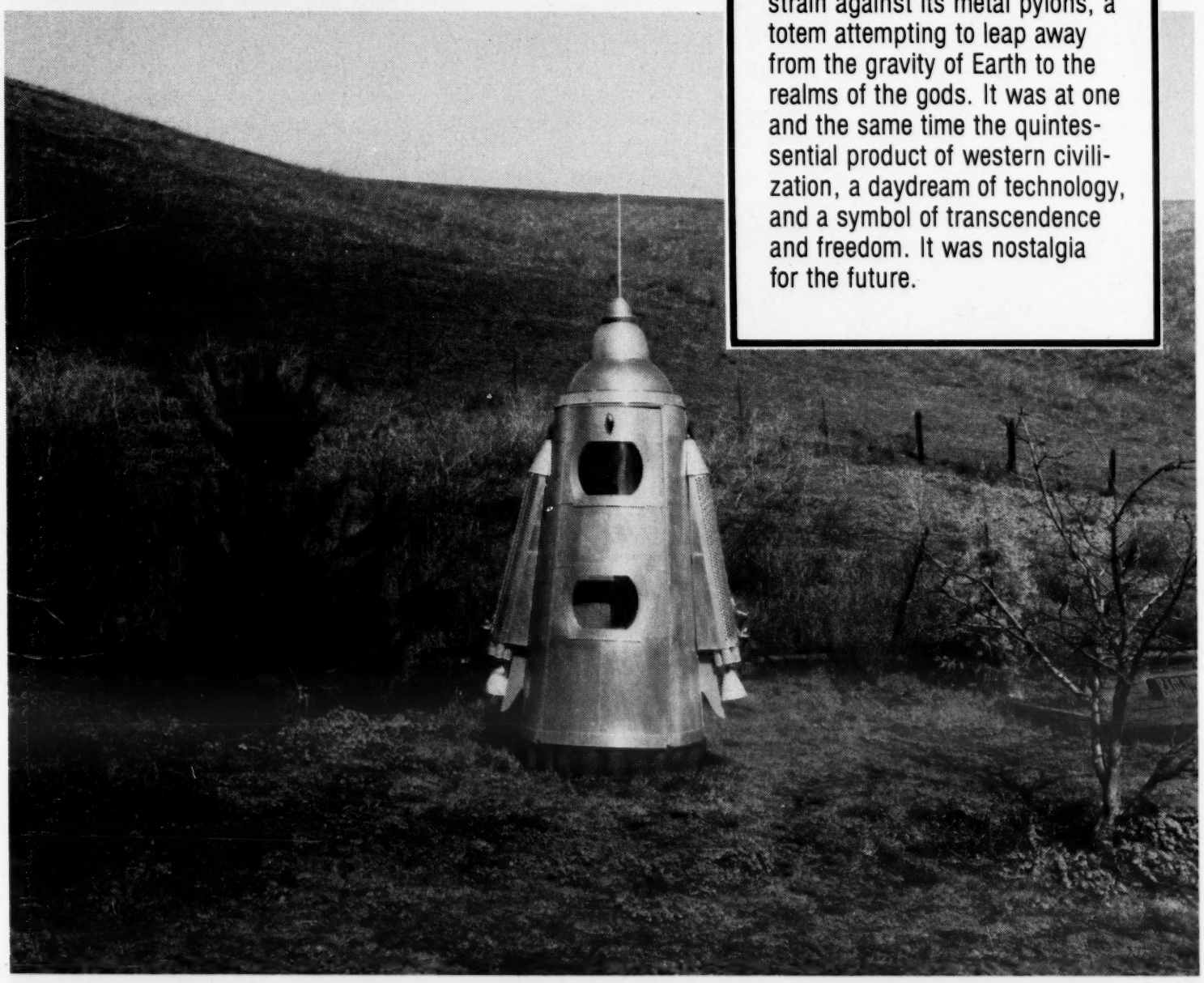
Coupled with the signaling gear is a system for detecting UFOs. In operation 24 hours a day, gravimeters monitor any violent changes in the Earth's magnetic field caused by UFOs. Radio direction-finding gear, coupled with the gravimeters, would attempt to pinpoint such a disturbance and in turn trigger a prerecorded message of peace and goodwill interspersed with binary tone signals automatically ranged over a scale of frequencies by a signal scanner.

John and his grandma live frugally; for example, they do without natural gas service in order to funnel money into materials for the project. Grandpa Lamb used to grumble at the growing incursion of paraphernalia into the living room. Eventually, he and Mrs. Lamb were left with only a small settee scrunched into a corner between whole walls taken up by their grandson's consoles and oscilloscopes. Grandpa Lamb died two years ago. Now John and his grandmother make a good team. Together they built an addition on the house to allow space for John's burgeoning equipment and put a rocking chair in the living room for Mrs. Lamb.

27 GATE FIVE ROAD SAUSALITO CA 94965

(Above) "The Rocketman" in Houston, Texas. (Below) Clayton Bailey's "Alien Rocket" in Port Costa, California.

It was while rounding a curve on a two-lane highway in Quebec that I found my first rocket. Thrust out over the trees lining the highway, it was held in simulated flight, reflecting the last light of the sun. Deus ex machina! The rocket seemed to strain against its metal pylons, a totem attempting to leap away from the gravity of Earth to the realms of the gods. It was at one and the same time the quintessential product of western civilization, a daydream of technology, and a symbol of transcendence and freedom. It was nostalgia for the future.



UFO's: A Scientific Debate

In 1969, the American Association for the Advancement of Science held a special UFO symposium, chaired by astronomers Carl Sagan and Thornton Page. The papers delivered at that conference are all here, making this the best book to read when asking the question "Are UFOs real?" You may not come away with a clear answer — half the papers are pro, half of them are con, and the authors are all excellent scientists — but you'll be well informed on both points of view. —Ted Schultz

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Ever since radar first probed the atmosphere, scientists concerned with the interpretation of the returned signal have been intrigued by mysterious echoes, or "angels," from invisible targets in the apparently clear atmosphere. The nature of these targets as proposed by various investigators falls into four categories: (1) surface and airborne targets below the line of sight which are brought into view by anomalous propagation, (2) insects and birds, (3) direct backscatter from sharp gradients or fluctuations in the index of refraction in the clear air, and (4) unidentified flying objects (UFO's).

UFO's: A Scientific Debate
Carl Sagan & Thorton Page, Editors
1972; 310 pp.
$7.95 postpaid from:
W. W. Norton
500 Fifth Avenue
New York, NY 10110

Enlargement of a frame of the Moline, Illinois, film.

The UFO Controversy in America

The most complete, sober, and objective social history of UFOs. Included is a thorough overview of the little-known presage of the modern UFO era, the "Mystery Airship" wave of 1896-97. Air Force coverups, government investigations, contactees, and UFO personalities populate the cast of this 20th century drama. —Ted Schultz

•

In 1897 witnesses reported a whole series of contacts with people making repairs on their airships. Several "presumably truthful" citizens of Chattanooga, Tennessee, said they "came upon the vessel resting on a spur of a mountain near this city. Two men were at work on it and explained that they had been compelled to return to earth because the machinery was out of order. One of the men said his name was 'Prof. Charles Davidson.' He is alleged to have said that the vessel left Sacramento a month ago and had been sailing all over the country."

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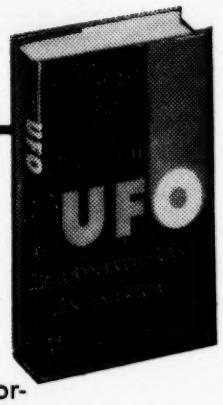
One month after the Considine article, *Time* magazine announced that all UFOs were actually Skyhook balloons, a theory widely accepted for a time. But Dr. Anthony Marachi, an Air Force chemist, argued that the Skyhook theory led people to a false sense of security because, in actuality, a foreign power launched the saucers. Marachi recommended that the United States identify the foreign power before Americans experienced another Pearl Harbor.

•

Contactee followers believed, as did legitimate UFO investigators and researchers, that flying saucers (UFOs) existed. The difference between the two groups was the reasoning that followed the belief. Most serious UFO investigators either refused to speculate on the origin of the objects or believed the extraterrestrial hypothesis best explained the evidence. They were split over whether to accept reputable witness claims of occupant sightings as part of the evidence, and many were hostile to any claims of communication. When a contactee claimed direct social intercourse with an alien and had no reasonable evidence to back up even the fact that he had sighted a UFO, most serious UFO investigators denied the claim as a fabrication.



The UFO Controversy in America
David Michael Jacobs
1975; 362 pp.
$17.50 ($19 postpaid) from:
Indiana University Press
10th & Morton Streets
Bloomington, IN 47405

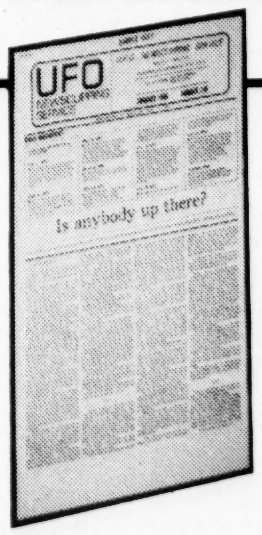
UFO Newsclipping Service

A monthly newsletter that reproduces clippings of UFO sightings from newspapers from around the world. Foreign language reports are translated into English. Simple, recurring accounts from housewives, farmers, cops, airline pilots, professional ufologists, and occasionally from reporters themselves. As a UFO heathen, I find the sheer volume, repetitive similarity, and grassrootness of these back-page reports, without theories, more persuading than any book on the subject, and the creepiest thing I've encountered in a while. —Kevin Kelly

•

"What do you make of it?" asked First Selectman Clifford Hurgin when a cluster of "UFOs" hovered above the Bethel High School athletic field where between 30 and 40 players and spectators were participating in an autumn bocce tournament about 10 p.m. on Oct. 17.

"What do you think it is? There are no sounds. It's not a helicopter, but it could be a blimp," observed Police Chief John Basile, a member of a bocce team participating in the tournament.



UFO Newsclipping Service
Lucius Farish, Editor
$55/year (12 issues);
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Plumerville, AR 72127

Reports of aliens seen by humans depict them as looking like human fetuses.

Eccentric Lives and Peculiar Notions

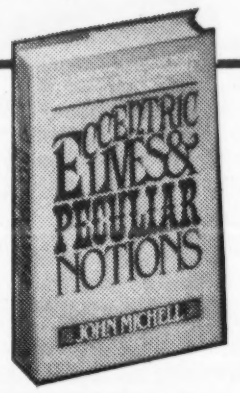
When I picked up this book, I didn't think it would move me to admiration for the people whose stories it tells, or that I might be inspired by them. And, though I'm not ready to run off on a flat-earth crusade, or to begin deciphering the cryptograms woven into every line of Shakespeare's plays, or to single-handedly build a castle out of hand-carved coral rock, I did find something universally human in the struggle of those who think independently, if somewhat erratically, and who stubbornly persist in the face of overwhelming derision. John Michell has performed a wonderful job of eccentric scholarship in compiling the life stories of these colorful characters and the histories of the movements that some of them founded. Did you know, for instance, that there is a small but vocal movement of "trepanners" who believe you can achieve a permanent psychedelic state by drilling a hole in your head? Me either.

A delightful read. —*Ted Schultz*

•

In the latter part of the last century a respectable-looking gentleman could be seen walking about the cities of Britain, gazing intently at young women. He always had one hand in his pocket, and every time he passed a girl in the street the hand would make a slight twitch. There was a perfectly innocent explanation for this: the pocketed hand belonged to Sir Francis Galton, the great man of science, and the purpose of his urban rambles was to gather material for a Beauty Map of Great Britain. Also in his pocket was a piece of paper divided into three sections. Each woman he saw was categorized as either beautiful, middling or ugly, and the judgment was recorded on the appropriate part of the paper by pricking it with a needle mounted on a thimble. No detailed results of these researches were ever published, but Galton's general conclusion was that the prettiest girls are found in London and the worst-looking in Aberdeen.

Eccentric Lives and Peculiar Notions
John Michell
1984; 240 pp.
$15.95
($16.95 postpaid) from:
Harcourt Brace Jovanovich
1250 6th Avenue
San Diego, CA 92101



Dr. William Price, the revolutionary Welsh Druid, in his ritual outfit of scarlet merino wool with green silk letters in the bardic alphabet he discovered.

Fate Magazine

Don't read ***Fate*** *magazine for credibility — read it for incredibility.* ***Fate*** *has been publishing articles on paranormal subjects since 1948, and in their efforts to provide the incredibility that their readers demand,* ***Fate's*** *editors send a lot of credulous stuff down the pike, including regular columns like "My Proof of Survival" and "True Mystic Experiences." Mixed in with such fare, however, is some genuinely provocative and suggestive stuff, a portion of which, in retrospect, proves to have been ahead of its time. For example,* ***Fate*** *may have been the first national magazine to publish articles about psychedelic drugs. (The January 1956 issue featured a cover story called "The Magic Land of Mescaline," with an appropriately tripped-out cover painting, and the subject of the January 1958 cover story was the shamanistic use of psilocybin mushrooms in Mexico.) Today,* ***Fate*** *publishes reliable articles on parapsychology, dream research, folklore, archaeology, and even debunkings and hoax exposes. Selective reading is the key here. Sure, there's plenty of the standard fare — miracle and ghost stories — but I consider that all part of the fun. And for my money,* ***Fate's*** *got the most entertaining classified ads of any magazine ever.* —*Ted Schultz*

•

I am having lunch in a Laramie restaurant with four contactees, one of whom is describing the beauty of the Venusian climate and the niceness of its inhabitants. When I politely ask how scientists ever got the idea that the planet has a surface temperature of something like 900 degrees F., the contactee explains that terrestrial probes "are beamed by the Venusians to land in the desert, where it's so hot that the earth metal in those machines was melting and malfunctioning two minutes after landing. The Venusians have lived there for millions of years and they don't want the humans to come flying over there messing up everything."

Boris Ermolaev, one of Russia's most imaginative young film directors, demonstrates his unique talents only to serious scientists, among them Venyamin Pushkin, a psychology professor at Moscow University, where he started carefully-controlled, government-authorized testing of the psychic as long ago as the early 1970s.

She remarks that no less than J. Allen Hynek, the noted astronomer and UFO authority, can attest to the reality of an inhabited Venus, since recently he has spent two weeks there attending a conference. I respond mildly that I know Dr. Hynek fairly well (I am on the board of directors of Hynek's Center for UFO Studies and edit its journal) and am unaware of any recent unexplained two-week disappearance on his part. "He wasn't in his body," the contactee replies, speaking as if to one unusually dense.

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Mary Margaret Fuller, Editor
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170 Future Way
Marion, OH 43300

AM I PSYCHIC YET?

by Paul Krassner
Illustrated by Bill Griffith

EVERYBODY needs a metaphor to deal with the mystery of life. Personally, I used to believe in reincarnation, but that was in a previous lifetime. There are those who say that even an aborted fetus *chooses* parents who will not carry the pregnancy to term. Well, maybe I decided to be born, but I was circumcised against my will. And now there is another, more subtle form of child abuse, described in the June-July '86 issue of *The Psychic Reader*. The item is about a man who took his daughter into a store:

> She got caught stealing a package of cigarettes. When asked why, she said, "Because my father wanted them." He laughed and called her a liar. The truth was the father was trying to quit smoking and was emoting so much energy of wanting to smoke that his daughter went over and picked up the cigarettes to give to him. She was not even aware that she had stolen the cigarettes.

The explanation?

> When sensitive family members are affected by a strong male, a very important function happens: He takes control over the brain. When a very angry male climbs into the space of a very sensitive wife or a very sensitive daughter with his energy, it is just as bad as striking them physically or violating them physically.

As a child, it was always very important to me *not* to believe in ESP. Adults might control many aspects of my life, but they could never exert power over what I thought. I indulged in the most bizarre fantasies, completely confident that they were not able to read my mind.

As an adult, I have tried to keep that mind open by maintaining what I consider a healthy skepticism. For example, at the Berkeley Psychic Institute in Berkeley, California, there is a clairvoyant training program — I had predicted there would be — and there is a clause in the application which states that students may cancel and receive full refunds if they do so in writing within two weeks. One would think that the registrar would have anticipated such an occurrence. ►

Paul Krassner last appeared in the pages of this magazine with a story called "Hypnotic Age Regression of a Television Addict" way back in Winter 1977/78. He's long overdue for a repeat performance. Recently he's revived his legendary publication, The Realist *(see page 74), which I subscribed to as a high school student in the late '60s, and which contributed to an expansive shift in both my political awareness* and *my sense of humor — no mean feat, and a favor for which I'll always be grateful. When I described the general contents of this issue to Paul, he decided he'd write about his close brushes with the paranormal . . . or lack of them. If you've never had the pleasure of seeing Krassner in his role as a standup comic, this is the next best thing.*
—Ted Schultz

I WAS ONCE a guest on the *Long John Nebel Show,* an all-night radio program in New York. We were discussing psychic phenomena in general and telekinesis specifically. I put a dime on the table and said that if it could be moved by sheer will power I would immediately become a convert. The other guests ridiculed me. These were powerful gifts, not to be toyed with, they said. You could not move a dime just like that; you had to work up to it.

"All right, let's start with a penny . . . "

The Amazing Randi was also a guest on that show. Now, more than a quarter-century later, he was a guest on the *Johnny Carson Show,* demonstrating by film and special audio techniques how a prominent faith-healer "miraculously" received personal information about his patients from his wife, concealed backstage, transmitting to a radio receiver hidden in his ear. I now wonder if Ronald Reagan's hearing aid is actually a receiver for data from Nancy on legislators so that the absent-minded president can "remember" how to blackmail them into voting for aid to the Contras.

IN THE FILM *Rosemary's Baby,* Mia Farrow spelled out the name of her neighbor with Scrabble letters, and when she mixed them around, they spelled out the name of a warlock she had been reading about in a book on witchcraft. Similarly, if you spell out the name of former Vice President Spiro Agnew with Scrabble letters and then mix them around, they spell out GROW A PENIS. This is so appropriate that it defies ordinary standards of coincidence, for when Senator Charles Goodell came out against the war in Vietnam, it was Agnew who called him "the Christine Jorgensen of the Republican Party," thereby equating military might with the mere presence of a penis.

When Mike Wallace interviewed me for *Sixty Minutes* and asked about the difference between the underground press and the mainstream media, I told him about the above anagram, pointing out: "The difference is that I could print that in *The Realist,* but it'll be edited out of this program." Once again, my uncanny ability to forecast events accurately was dramatically demonstrated.

In 1963, during a standup performance at Manhattan's Town Hall, I said that the androgynous singer Tiny Tim would someday get married on the *Johnny Carson Show.* Six years later it happened. I thought I had merely been projecting into the future a certain cultural trend of co-option, but Baba Ram Dass has called this an example of astral humor. "The connections are all out there," he said, pointing to the heavens. "It's just a matter of plucking them."

I guess one person's logic is another person's astral humor. More recently, I've said on stage that an AIDS victim would be charged with attempted murder when he spat at someone, and that came true. I've also said that since facial stubble has become fashionable by the grace of *Miami Vice,* some entrepreneur would market a razor that *left* facial stubble, and *that* came true.

This is comedy voodoo, and we mustn't let it fall into the wrong hands. I've recently said on stage that the next baboon-to-baby heart transplant would take place as soon as another baboon was in an auto accident and the proper release papers were signed by its parents. Does this mean there will soon be a rash of auto accidents involving baboons?

IN 1970 I took a workshop with John Lilly at Esalen. He was attempting to explore mysticism by the scientific method. We were not allowed to use such words as "project," "fantasize," "daydream," or "rationalize." For the purpose of the workshop we had to accept any experience as reality.

I communicated with my old friend Lenny Bruce, who had died four years previously. Lilly had been talking about not publishing the book he was working on, *The Deep Self,* and Lenny told me to tell him that it was his responsibility to publish it. But Lilly was consistent. "That's Lenny's problem," he said. Nevertheless, the book was published.

Later on, this contact with the grave continued, but I was now allowed to rationalize that I was using Lenny as a touchstone, projecting how I thought he would feel about something. I told his widow, Honey, about this, and she said that she communicated with the spirit of Lenny, too. I asked, "How do you know you're not just projecting?" She replied, "I *know.*" Who could argue with that?

IN 1972, six weeks after the Watergate break-in, I presented the printer with a manuscript by assassination researcher Mae Brussell, titled "Why Was Martha Mitchell Kidnapped?" While the mass media still

referred to the incident as a "caper" and a "third-rate burglary," her article delineated in detail the conspiratorial aspects, naming L. Patrick Grey, John Mitchell and Richard Nixon. Called crazy at the time, nine months later she was vindicated.

However, the printer wanted $5,000 cash — in advance. I didn't have it. I left totally confident, yet with no reason to feel that way. When I got home, the phone rang. It was Yoko Ono. I had met her in the '60s when she was an avant garde artist, and I had put all my savings into her absurdist project, where folks would get into big black burlap bags on a wooden platform at a macrobiotic restaurant, and people would pay to watch them move around. I think it had something to do with my guilt about money.

Now, Yoko was married to John Lennon. They were visiting San Francisco, and did I want to have lunch with them? Suffice it to say that I brought the galleys with me, and we all ended up going to the bank and withdrawing $5000 cash. My mind was thoroughly blown. I could rationalize to bits the process by which we had come together, but the timing was so exquisite that for me coincidence and mysticism had become the same process.

At that time, the Nixon administration was afraid that Lennon would entertain protesters at the upcoming Republican convention, and there was a strong attempt to deport him. The FBI refuses to release the portion of his file for that period when he was under such heavy surveillance. And, caught somewhere between information overload and political paranoia, I went slightly bonkers myself.

On a bus to Santa Cruz, I was convinced that the man sitting in front of me was a CIA operative. In order to confuse him, I used my ball-point pen as a walkie-talkie: "Calling Abbie Hoffman. Calling Abbie Hoffman . . ." Abbie was freaking out himself around the same time, and it occurred to me that I might have actually *reached* him in this unorthodox manner. Recently I asked him about that.

"Oh, yeah," he replied. "I got your call but I didn't accept it 'cause you were calling collect."

PERHAPS I have simply become too hard up for mystical experience for my own good. But why do those creatures from outer space always make their presence known to *others*? Why don't they ever come to *me*? I would give them publicity or granola or whatever they wanted.

Only once was I convinced that I was about to have a close encounter with beings from another planet. From a cliff above the beach I could see them, dark figures with no ears. They were marking up the ocean floor, dividing it into latitudinal and longitudinal lines, just like on a globe. I was so excited. At last! Only, they turned out to be a few guys in wet suits, and they were digging for clams. Oh, well.

When *Hustler* publisher Larry Flynt got converted to born-again Christianity by Ruth Carter Stapleton, the evangelist sister of then-President Jimmy Carter, he hired me to reform his magazine of gynecological porno. I asked him a test question: "Do you believe that Christ is the one true path to salvation?"

"I believe," he responded with a Kentucky twang, "that Jesus was not a more important teacher than Buddha, and that neither Jesus nor Buddha is more important than any individual."

He took me into his office and said, "Do you see that wall there? I can make that wall come tumbling down through sheer will power." *Oh boy,* I thought to myself, *this is gonna be some job.* "But," he added, "I don't wanna misuse my power."

Nobody ever wants to misuse their power for me. The Transcendental Meditators won't levitate for me. Uri Geller wouldn't even bend my fork. Maybe it's hopeless.

Flynt got shot a few months later, his wife

Althea took over, and she fired me. I called up family and friends so they wouldn't learn this news from the media. Ken Kesey said, "Why don't you come to Egypt with us? The Grateful Dead are gonna play the Pyramids."

I lay down in a long-dead king's sarcophagus in the middle of the Great Pyramid and started chanting. I wanted a sign so badly. But nothing happened. The only sign I got was that the tomb smelled from somebody's urine. Maybe the guides were being tested for illegal drugs.

Recently, though, it finally happened. I got my sign. I was watching a movie on cable TV, *Falling in Love* with Meryl Streep and Robert DeNiro. I wasn't sure whether I wanted to continue watching it or not. Outside there was a fantasic thunderstorm. Suddenly, a bolt of lightning struck, and my TV set went off.

Okay. I believe, I believe.

Why, just the other day I'm sure I heard a butterfly complaining about how it was really a caterpillar trapped in a butterfly's body . . . ■

The Realist

The Realist
Paul Krassner, Editor
$23/year
(12 issues) from:
The Realist
P. O. Box 14757
San Francisco, CA 94114

Best of the Realist
Paul Krassner, Editor
1984; 256 pp.
$8.95
($9.70 postpaid) from:

Running Press
125 South 22nd Street
Philadelphia, PA 19103
or Whole Earth Access

Miracles do happen. ***The Realist*** *is back. Professional scamp Paul Krassner has been talking about reviving the granddaddy of all underground magazines for over a decade, but it took several years of Reagan and a loan from a sympathetic foundation to finally make it happen.*

During the late '50s and early '60s, ***The Realist*** *was almost alone in offering wicked, anti-establishment satire and commentary to a literate audience. Its contributors included Lenny Bruce, Norman Mailer, Robert Anton Wilson, and cartoonist Dick Guindon, among others, and its influence far outweighed its circulation. During its most notorious period in the late '60s and early '70s, it indulged in political put-ons (such as the infamous "Parts Left Out of the Kennedy Book") and unleashed Mae Brussel's minutely researched conspiracy theories on an unsuspecting public.*

The cream of the magazine's run from 1958 to 1974 is attractively anthologized in ***Best of the Realist*** *from Running Press. Chock full of cartoons, interviews, fibs, and jabs to both the left and the right, the anthology is a bargain at $8.95.*

The Realist *itself is back in the flesh as an 8-page newsletter on a monthly schedule. Since Krassner has been most active as a standup comic in recent years, the new incarnation has a quicker off-the-cuff pace than the old. If you liked* ***The Realist*** *before, you'll be pleased to meet it anew. If you only knew it as a rumor in the past, now's a good time to see what the talk was all about.*

—Jay Kinney

•

And be sure to tell 'em Groucho sent you . . .

Groucho Marx said in a recent interview: "I think the only hope this country has is Nixon's assassination."

"Uh, sorry, Mr. Marx, you're under arrest for threatening the life of the President. I can't tell you how much I enjoyed *A Night At the Opera*. Here, now if you'll just slip into these plastic handcuffs . . . ."

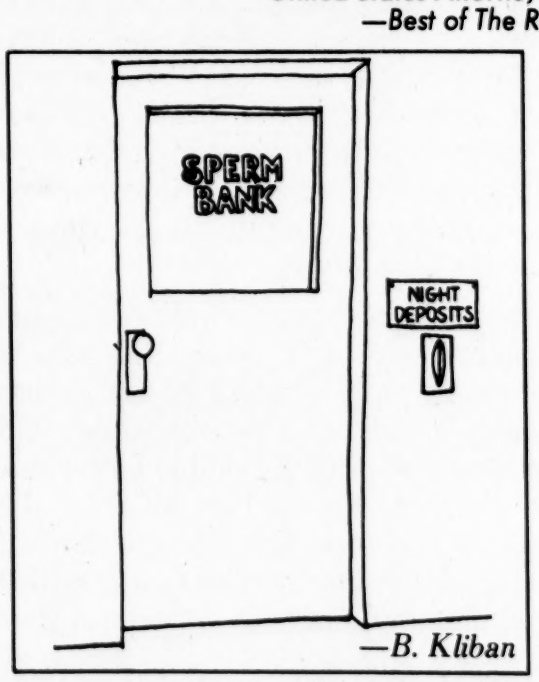
I wrote to the local office of the United States Department of Justice, inquiring about the status of the case against Groucho, particularly in view of the indictment of Black Panther David Hilliard for using similar rhetoric.

Here's the reply I received:

Dear Mr. Krassner: Responding to your inquiry, the United States Supreme Court has held that Title 18 U.S.C., Section 871 prohibits only "true" threats. It is one thing to say "I (or we) will kill Richard Nixon" when you are the leader of an organization which advocates killing people and overthrowing the government; it is quite another to utter the words which are attributed to Mr. Marx, an alleged comedian. It was the opinion of both myself and the United States Attorney in Los Angeles (where Marx's words were alleged to have been uttered) that the latter utterance did not constitute a "true" threat.

Very truly yours,
James L. Browning, Jr.,
United States Attorney

—Best of The Realist



—Best of The Realist

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Trivial Censorship:

John Nason, vice president of public relations for Selchow & Righter, manufacturer of *Trivial Pursuit*, admits he was embarrassed by a question included only in the early editions of the game, namely:

"How many months pregnant was Nancy Reagan when she walked down the matrimonial aisle with Ronald?"

The answer was two months, although Nancy may now wish that she had gotten an abortion, so that daughter Patti's novel would never have been published.

—The Realist

Your Pathway to COSMIC TRUTH —BY MAIL!!

The Keys to* INSTANT SUCCESS, MYSTIC KNOWLEDGE, MIRACULOUS INVENTIONS & CONTACT WITH THE SPACE BROTHERS *are Within Your Grasp!

—For Only a 22¢ Stamp

by Rev. Ivan Stang, Philosophur Ekstaticus
Church of the SubGenius

DO YOU HAVE "different" tastes? Intrigued by the bizarre, the kooky, the outré — as long as it keeps its distance? Enjoy getting unsolicited, *unspeakably weird* things in the mail — for free? Love to snicker in superiority (perhaps largely imagined) at the incredible gullibility of others? Enjoy reading the headlines on sleazy tabloids, and ads for local psychic fortune tellers? Appreciate unexpected glimpses of the strange "realities" behind religions other than your own? Entranced by the thought processes of the mentally ill? *Painfully aware that all the great geniuses and inventors of the past appeared totally insane to everyone around them?*

Then . . . HAVE WE GOT A HOBBY FOR YOU!!

The Travelling Snake-Oil Medicine Show isn't dead — it just travels by mail. Simply by writing for information — *without sending money* — you can embark on a never-ending tour of the zoo of beliefs, the circus of gullibility, the freak show of Faith, the arena of the utter strangeness of true genius, of that which is all-too-literally ahead of its time.

Few hobbies are simpler. Here's how it's done:

You type up a form letter, saying something ambiguous like, "I am interested in your product/services. Please send details, catalog." Xerox a few dozen copies of it. Go through this article, as well as the cheesy ads in the back of your favorite lowbrow magazines (*Soldier of Fortune*, perhaps, or the *Weekly World News*, or that great old stand-by, the *National Enquirer*) and mail off for anything that interests you. With the more fanatical groups, a simple request for information like this can net you several thick volumes of priceless *bulldada* (a collectors' term meaning "that which is great because it doesn't know how bad it is"). A rule of thumb seems to be that the weirder and broker they are, the more they'll send. It's supply and demand. There's no demand for the truths they so desperately hold out to a scoffing world, so if you show even the slightest interest they'll bombard you by mail with lurid accounts of their amazing discoveries.

Your 22¢ investment will pay off geometrically as your address is sold from one mailing list to another. Soon, A MILLION CONTRADICTORY PATHS TO HAPPINESS will be vying for your *personal* atttention in the mailbox, paths ranging from inadvertently hilarious delusions to the wisdom of the ages, yet — and this is the most revealing part — each one *the only TRUE Path!!*

As will become obvious, the items listed certainly aren't selected on the basis of "class" or even sanity, although one frequently stumbles upon both, but a certain rare, delicate spirit of incurable psychosis. Considerable pains have been taken to avoid the merely "artsy" or the avant-garde; "artists" and "put-ons" are a dime a dozen. These are the REAL THING — straight from authentic diseased

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When I asked Church of the SubGenius founder Ivan Stang to write a survey of mail-order strangeness, he quickly produced 85 pages and described this as "only the tip of the iceberg!" Whittling his compendium down to its current length has been a difficult and slightly mind-skewing process. For those of you maniacal enough to want more, he lists weird-mail directories toward the end of this survey, and the SubGenius' own magazine, The Stark Fist of Removal, features such listings regularly in its "Other Mutants" section (see page 86 for more on the SubG Church). —*Ted Schultz*

Some descriptions submitted by: Dr. Philo U. Drummond, T.J. Tellier, Dennis Cripps, Glenn Bray, Lou Minati, and other associate Members of the Church of the SubGenius.

©1986 Rev. Ivan Stang

minds, transcendent visionaries, and individuals DRIVEN to communicate their CRUCIAL DISCOVERIES to an UNCOMPREHENDING, and, yes, even *SMIRKING* world.

Not all of those listed are kooks, by any means. Some are geniuses, and the "free info request" letter does not work with them. Send them whatever meager money they require, and do it quickly. The miraculous doesn't hang around forever.

Weirdness-by-mail is a *safe* hobby; in my ten years of collecting, I have never once had any kook, psychotic, holyman or enlightened genius appear at my door. The Secret Service, yes. But they weren't trying to sell me anything.

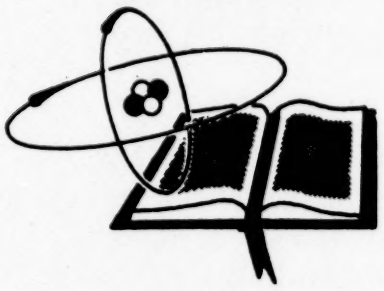
Listings have been divided into the categories of science, religion, politics, art, and "miscellaneous." These divisions are by necessity somewhat arbitrary; in the world of philosophical misfits, diverse, normally unconnected subject matters tend to bleed into one another. Science explains the physical world, art explains the emotional world, politics explains itself, and religion explains the unexplainable (which may lead some to suspect those particular explanations) . . . cram all these ingredients into a brain in turmoil, set controls to "blend," scramble them all together in a big mental slurry, and, VOILA! FREE ENTERTAINMENT!

HELPFUL HINTS:

Spirit mediums, UFO contactees, fly-by-night Mystery Schools and self-published artists are notoriously short-lived. At the time of writing, all addresses were good, but we can't guarantee how long they'll last.

When ordering magazines, Canadians should always add a dollar for extra postage; for overseas orders, add $2. Prices quoted are in U.S. dollars — use international money orders or checks drawn on U.S. banks.

WEIRD SCIENCE



THE EARTH IS THE CENTER OF THE UNIVERSE!
Bible-Science Association
2911 E. 42nd St.,
Minneapolis, MN 55406

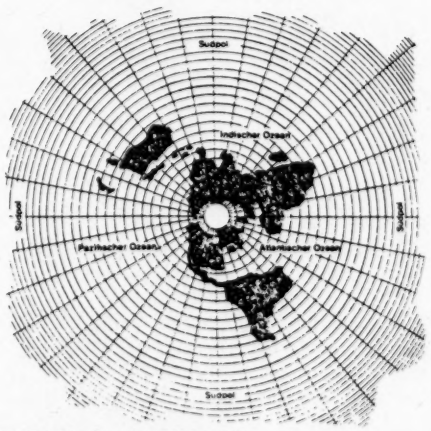
Your headquarters for Creationism over Evolution. The booklet GEOCENTRICITY offers, for 35¢, Biblical *and scientific* proof that the Earth is standing still at the center of a revolving Cosmos. I'm with them — screw all those telescopes and astronomy stuff anyway. Humanists like Copernicus, who say this planet is nothing special, are just trying to avoid thinking about The Judgement. "It is not the Earth that is spinning, but the sky that is spinning." *Something's* spinning, that's for sure. Free catalog of books, audio cassettes, and videos (!) on the *real* history of our planet, all Biblically verified. Adam and Eve lived 6,000 years ago. Videos of the ruins of their home, and also of the Tower of Babel. Native Americans are ancient Hebrews. Photos of the Ark of the Covenant.

"Giant Man Tracks" next to dinosaur footprints in Texas prove Covenant Men walked with the Great Reptiles. 50¢ for a dozen tracts, Newsletter, $12/yr.

. . . AND IT'S ALSO FLAT!
International Flat Earth Society of Covenant People's Church
Box 2533, Lancaster, CA 93539

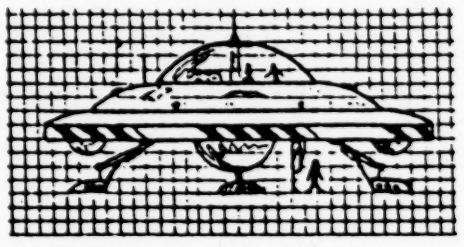
The unutterable stupidity and vanity of those who STILL MAINTAIN against all common sense that the world is "round" will soon learn the hard way, when they all fall off the edge.

Flat Earth Map of Known World



TIME CAMERAS!
ANTIGRAVITY DEVICES!
4 SALE CHEAP!
Active R&D
P.O. Box 323,
Coeur d' Alene, ID 83814

Ask for catalog of build-it-yourself plans for Lucid Dream Machines! Anti-gravitics! Contacting aliens!



Increased gas mileage! Aura Energizers! Focalizing Crystal Power Rods! Psychotronic ESP-amplifiers. Spaceship plans, time cameras. "Time cameras?" The damn secrets of the universe have been for sale right under our noses all this time, and nobody's paid any attention! Free sample of newsletter *Hyperview*; or $11.95/yr.

THE HOLLOW EARTH SPEWS FORTH DEMONS
Shavertron
P.O. Box 248, Vallejo, CA 94590

In vast tunnels beneath our planet dwell quasi-physical entities called Deros, who date back to prehistory — and who still prey on humans by mind control. This discovery by the late Richard Shaver is kept alive and thrashing in this magazine, which is actually balanced by healthy senses of humor and skepticism. The editor has a great handle on the whole issue of harrassment by invisible entities. Or didn't you know that was an issue? Not entirely a kook-zine, but an excellent forum for kook-theory *fans*. Send $3 for sample; $9/yr (3 issues).

COMMUNIST DESCENDANTS OF THE ABOMINABLE SNOWMAN
Inner Portraits
by Stanislav Szukalski
Glenn Bray, P.O. Box 4482, Sylmar, CA 91342

This coffee table-sized book is a real treasure on two normally conflicting counts: Szukalski's artwork is astonishing, while his bizarre discoveries in his science of Zermatism, to which his art relates, are among the most compellingly weird this writer has encountered. There are two races: true Humans, and Yetinsyn halfbreeds, the degenerate progeny of Human women raped by Yetis (i.e., Bigfoots, Pans, Abominable Snowmen). The Yetinsyny tend to be criminals, communists and dictators. There's far more to it than that, though, and it's nearly impossible to do justice to the *style* of this book; Szukalski is an unsung Crazed Genius whose written rants, beautiful art and tragic life story all swing between the upliftingly surreal and the psychotically paranoid. A God among kooks. $12.00 postpaid and actually well worth it!

THE ULTIMATE SUPERBRAIN HUMAN FUNCTIONING SECRETS!
Modern Humans
Fry's, 22511 Markham, Perris, CA 92370

Incredible free tabloid catalog comes in two parts — first, ads for various rare books and folios on psychotronic technology, Crystal Levitators, time machines, Tesla space drive inventions, pyramid power, alien aircraft on the Moon, divining rods, perpetual motion machines, etc. Second half is a giant come-on for the "Modern Humans" course in Superbrain energies, much of which is devoted to explaining why they charge so much. "Our Time Camera covers from one hour to 99 million years! Just think what you could do! You'll have a blast with this gem of a unit!" We can only pray that this knowledge does not fall into the wrong hands! Best feature is the primitive clip-art. Send $1 for more detailed catalogs.

GET YOUR GENUINE HIERONYMOUS INSTRUMENTS HERE!!
Advanced Sciences Advisory Journal
PO Box 109, Lakemont, GA 30552

Dr. Heironymous sells radionic beam projectors and Cosmic Pipes through this newsletter, which also runs articles on Universal Energy, psychotronics, gravity control and the like. A small Cosmic Pipe of, say, 40 acres is only $500! Your soul is a gravity field; "the universe was *created* and all systems are in a state of *devolution*." Are we not men?

These are not the IMITATION Hieronymus Instruments, folks. But I shouldn't make fun; the actual scientific content of these psychotronic mags is so far over my head that for all I know, they may be entirely right! What's tough is not *knowing*. $2.50 each/$15 yr.

UNIVERSE TWO: NOT BETTER, JUST DIFFERENT
The Quarternion Journal
Fraser Hall, 101-1345 W. 13th, Vancouver V6H 1N7, CANADA

Devotes itself to "highly abstract possibilities in science and art." Highly abstract is right. Nuttiest damn theories on logic, reality, and the universe you could hope to find. Bizarre diagrams illustrating the foundations of existence. This is what you might call "naive quantum physics." No price listed;send SASE and request sample of #1.

LAKESIDE RESORT CONDOS OF THE GODS
The Stelle Group
Stelle, IL 60919

"Dawn of a New Age City." An actual town where you can escape the end of the world and learn from the "ancient Brotherhood," except that it isn't really quite built yet. Based on *The Ultimate Frontier*, a techno-occult book foretelling disasters for the turn of the century. Starts off looking like a planned community built on alternate technology — fuel alcohol, wind energy, hydroponics . . . then you find out they're going to make you an "Initiate" of the White Brotherhood. Free info.

ONE-STOP WEIRD SCIENCE SOURCE
Borderland Sciences Research Foundation,
P.O. Box 549, Vista, CA 92083-0190

Among the granddaddies of weird science, these guys have been around since 1945 — long before New Age latecomers. They publish a backlog of papers on subjects like ether physics, radionics, dowsing, Tesla, hollow earth, UFOs, cancer cures, etc., etc. Their bimonthly journal features nifty plans for all kinds of build-it-yourself devices like Jet Lag Neutralizers and Homo-Vibra Ray Machines, some of which they also sell already assembled. The journal is $15/yr; write for free info.

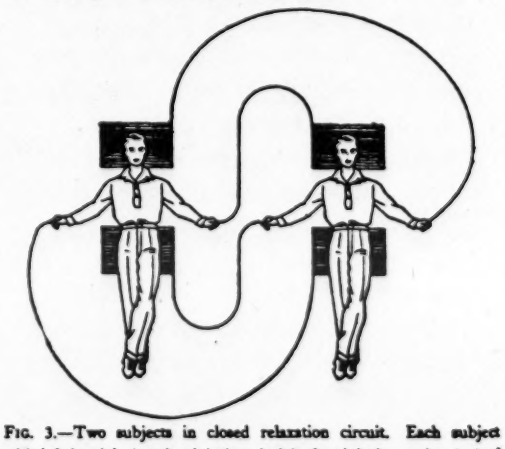


FIG. 3.—Two subjects in closed relaxation circuit. Each subject with left hand (−) to head (+) and right hand (+) to spine (−) of other subject.

UFO CONTACTEES

Of the thousands of people who receive the telepathic siren call of the space people, only a handful go public. Most aren't making any money, or even trying to, an indication of their sincerity. They heard the voices in their heads, and took them at face value.

YOU HAVE BEEN REMEMBERED BY THE SUPERIOR RATIONAL
Rational Culture
Caixa Postal 78.019-26150, Belford Roxo, Rio de Janeiro, RJ BRASIL, S. America

Flying saucer cults have become so prevalent in S. America that they represent a new religion; this is one of the biggest "denominations." It's also the funniest, partly because the translations from Portugese into English are so badly done as to severely amplify the already psychotic tone. "Our world is a bird that fabricates other birds, that we are and that here we are in passing." See? Not only are their newsletters and "space bible," *Universe In Disenchantment,* dictated by the space brothers, the book was actually *printed* by them! Millions of copies, imported by spaceship, imbued with healing power. Just owning a copy will cure any disease and even clear your home of poltergeists. The cosmic alien authors, collectively called The Superior Rational, offer a history of the Universe in which we didn't evolve from monkeys, but from ash-monsters formed from primordial "resin." "The primitive bodies were little monsters and afterwards monsters. Then monsters, after big monsters and after huge monsters . . . improving as the deformation progressed: they screamed-utter, made gestures to understand each other." This may sound really stupid to you, but in size this cult is gaining on the Mormons. Write for price list and info under current exchange rates; say you need lots of info because you are "with the Superior Rational." SPECIFY THAT YOU WANT IT IN ENGLISH!!

EVIL ILLUMINATI SPACE-BOLSHEVIKS SECRETLY RULE WASHINGTON!
Cosmic Awareness
P.O. Box 115, Olympia, WA 98507

The Lord God Almighty, using a new name, speaks through His earthly vessel Paul Shockley about everything from the hollow earth saucers to the takeover of the U.S. government by Russian clones . . . and the takeover of Moscow by secret *Christian* clones. The Cosmic Awareness newsletter on current events is like a soap opera from Hell; I guess the Lord has gotten cynical. Metaphysical paranoia with a uniquely sardonic slant; much less corny and cliched than most Space Voices of God. No second-guessing these characters. Send only $1.50 for their 100-page classic book, *Cosmic Awareness Speaks,* and price list. A great buy.

INTERPLANETARY NEWS!
The Planetary Center
7803 Ruanne Court, Pasadena, MD 21122

Contactee Laura Mundo, a sweet little old lady, has been publishing saucer teachings in a newsletter for years. She is very ill, sad to say, and now her people are giving away copies of her many booklets, plus selling her autobiography, *The Mundo UFO Report,* for only $2 -- a steal! (Unlike many other saucerians, Mundo hasn't been doing it for the money.) Classic contactee stuff; the space brothers have communicated with Laura for years and she reveals the paths to becoming a Pre-Atomic Energy Being like them. (The Trinity, by the way, really means neutrons, protons and electrons.)

SURVIVE DOOMSDAY WITH THE SPACE BROS.!
New Changes (Blue Rose Ministry) *P.O. Box 622, Joshua Tree, CA 92252*

If you are "ready," you can become one of the Chosen Ones who will be rescued by saucer from our doomed planet. Many booklets and cassette tapes offered, including guided tours of the Outer Planets by astral beings. For instance, "Ankar 22" of Jupiter describes all social and technical aspects of his home planet. This information is available telepathically, for NOTHING; yet NASA spends MILLIONS on crude rockets, and hasn't even been able to detect the huge cities on Uranus!! THE SOLAR SPACE LETTER $8/year; beg for sample.

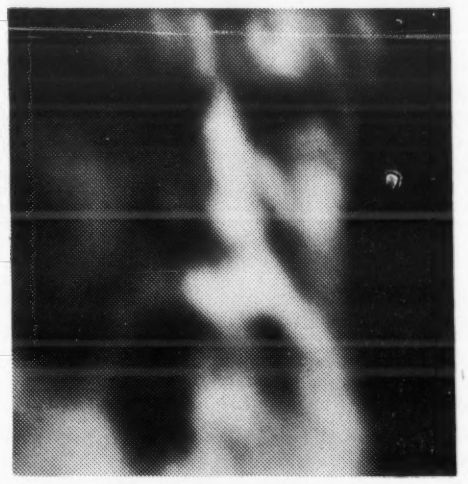
WAR ON SKEPTICS
Secrets Newsletter
Rt. 4, Box 156, Marshall, AR 72650

It will be "too late for all but a handful to escape the pulverizing, the fire and deadly smoke that will come raining down from out of the strange craft we call Flying Saucers, totally obliterating cities, towns and the countryside (fear of this invasion is the real reason for Mr. Reagan's 'Star Wars' program)." $1 for sample; $8/yr.

JESUS CONTACTEES

The good news is, Jesus Christ has come again. The bad news is, He keeps coming and coming, again and again, under dozens of different names. It's getting hard to keep track of just how many Jesii are running around out there. For some reason, He has chosen not to contact any mainstream Christians, but works within strict New Age guidelines, speaking through mediums and Neo-Theosophists like the ghost of your dead grandma or any other common earthbound spirit. How are Jesus contactees any different from UFO contactees? You got me.

What follows is but a smattering of the multiple Jesii one can now choose from . . . look for more as the year 2000 approaches. If you suffer from that nagging Gnostic feeling that "He" is back, check these out. You may change your mind.



YUP, AH REMEMBERS CREATION JES LAK IT WUZ YESTERDEE
Search & Prove
Box K, St. Paul Park, MN 55071

God Almighty calls Himself "Mora" when addressing this particular cult. He definitely "talks down" for this one, sounding like a friendly old hick codger. Funny how He changes styles depending on the financial standing and social class of the potential follower.

ANY MINUTE NOW . . .
Tara Center
Box 6001,
N. Hollywood, CA 91603

This well-funded group of New Agers keeps promising that the new God Junior is about to reveal Himself; he's a Pakistani living among the poor in London, but "cannot" reveal himself until the world press starts to give him some credence. This Mexican standoff has been going on for six years now; meanwhile, the faithful keep subscribing to the newsletter, forming "Transmission Groups" to send out good vibes, and . . . waiting . . . Jesus — well, actually Maitreya the Christ, the New Age version of Jesus — sends out occasional antihunger messages by overpowering the mind of Benjamin Creme, a charismatic medium from the Alice Bailey school of the occult. Express solidarity, and you'll get their cliffhanger-style mailings.

MIGHTY CAYCE HAS STRUCK OUT
A.R.E. *P.O. Box 595,*
Virginia Beach, VA 23451

Although the great trance medium Edgar Cayce has been dead for years, this fixture on the New Age scene has been dutifully reprinting and re-categorizing every sentence he ever uttered while asleep. The bewildering thing about Cayce is that while his trance diagnoses and cures did sometimes work miraculously, he also spewed forth endless accounts of life in Atlantis before the Flood and other somewhat improbable chunks of surreal ancient history — plus some prophecies for the modern world that weren't exactly on target. On the other hand, has mainstream university-style history really proven itself to be any more accurate? Ask for free catalog of books and tapes.

E-YADA-YADA-YADA
Inner Circle Teachers of Light
Universal Life
152 Thompson Ave.,
Mountain View, CA 94043

The ancient, funny-named Master Entity "E-Yada-di-Shiite" speaks through the late trance-befogged medium Mark Probert in a series of primitive, hand-lettered

pamphlets and $11 tapes. "The world is an immense sleight of hand . . . Lose Your Entanglement with Matter . . . Streamline Your Mind." Go for the 10¢ pamphlets — the art and layout say it all. Send SASE.

RAPTURE ... OR RUPTURE? IT'S UP TO YOU!
Universal Kingdom newsletter
Oregon Vortex of Light,
Box 938, Roseburg, OR 97470

From the White Star Illuminator. We CAN avert catastrophe if we all join the right club, namely, this one. "No denial is valid!" We are all feeling "the Quickening" whether we believe it or not. It is essential that the Earth's magnetic poles switch polarities . . . and the foolish "experts" will all die; only "the lowly" will survive. ARE YOU READY FOR THE 4th FREQUENCY??

LOURDES OF THE NEW CHURCH
Roses Our Lady of the Roses Shrine, *Box 52,*
Bayside, NY 11361-0052

From Bayside, "The Lourdes of America" — the Virgin Mary speaks through housewife Veronica Lueken and unveils a series of blood-soaked warnings about cults, commies and child molesters. Flying saucers are demons which kidnap children. A real tearjerker, written in florid zombo-Catholic style.

BIG B.V.M. FLAP CONTINUES
Diamond Star Research
Rte. 2, Box 608,
Necedah, WI 54646

Apparitions of the Blessed Virgin Mary "and other Celestials" appear to these worthies, bearing messages of peace/hate for the innocent/guilty. Newsletters, $3 each, go into great detail about Her secret warnings to mankind. Some UFO connections. Intro booklet is $1.50.

MORE WEIRD RELIGION

THE SECOND CUMING
Truth Missionaries of Positive Accord *P.O. Box 42772, Evergreen Park, IL 60642*

It's tough to get a handle on this group; they have few precedents, and their material is thick with that hard-to-read verbosity that characterizes ambulatory schizophrenics. Offers Biblical proof of a "Goddess Eve" — part of it involves cosmic fellatio between consenting male and female "tachyon deities." The original male tachyon deity "spurted" into the mouth of the female tachyon deity, who in turn injected it into the womb of the Virgin Mary. Repetitive but highly original and complex ravings about Holy Sperm, Yahweh's ejaculation, Pure Milk Rays, etc. Where some faiths count the angels on a pinhead, this one counts the chromosomes in Jehovah's sperm and nitpicks unto infinity about other Triple-X-rated theological details. But what about God's POOP? What about the Goddess's BOOGERS?? All materials are free; I imagine it's hard to give this stuff away, unheeding Earth-fools being what they are . . .

HE KNOWS WHEN YOU'VE BEEN BAD OR GOOD
Journal of the Institute of Scientific Santa Clausism
D. Meyer, PO Box 70829, New Orleans, LA 70172

Seeking scientific and historical evidence for the literal existence of Santa Claus. They claim to have discovered an actual Shroud of Santa. Not for Secular Ginchists or Claustrophobics. They are trying to be objective and skeptical (!) Great ads in the back. $2/yr; send 50¢ and SASE for sample.

DOCTORS FOR WOTAN
The Runestone Asatru Free Assembly,
P.O. Box 1754, Breckenridge, TX 76024-1754

Dedicated to resurrecting the ancient Norse gods and the religion of Odinism. The Hoar-Frost Giants LIVE!! Ragnarok is around the corner, but most people don't even know what it is. A background in the Marvel Comics series *Thor* helps here. $9/yr; ask for sample.

NYAH, NYAH!
Fundamentalism is Nonsense
Jim Lippard, PO Box 37052, Phoenix, AZ 85069

One of those little publications pointing out contradictions and ludicrous statements in the Bible. Jeez, what a spoilsport! Points out some of the "banned gospels" that the early Christian establishment censored; interesting bibliography in the back. Not atheist fodder, but "doubters" material. $2.

END O' THE WORLD II
Psychic Prophecy News Bulletin
Burchette Bros., P.O. Box 1363, Spring Valley, CA 92077

The coming supercomputers that can talk to God . . . approaching worldwide plagues . . . World War Three and the Secret Ark of Deliverance . . . Armageddon and much, MUCH, *MUCH MORE!!* Ask for free sample. Three monthly issues for $18.

YOU WILL MEET A TALL, DARK STRANGER
Astrology and Psychic News
California Astrology Assoc., P.O. Box 810, N. Hollywood, CA 91603

Black Hole exists in small town! Einstein's formula can predict your future! Dead wife conveys message through husband's calculator! Psychic suggestion brings dead girl back to life! Has someone put a curse on you? Ask for sample; $20/yr.

THE ULTIMATE "DUH"
Eckankar™
P.O. Box 3100, Menlo Park, CA 94025.

The Stupidest Cult. A coloring-book occult/oriental philosphy in which daydreaming and wishful thinking become "the ancient science of soul travel." Learn to project your astral body *while driving!!* Strange astral-world cosmology reminiscent of 1940s pulp science fiction. Proof that you can't go broke underestimating the intelligence of the American seeker. Ask for every free brochure they can spare, and they'll probably send you a book by the current Living Eck Master.

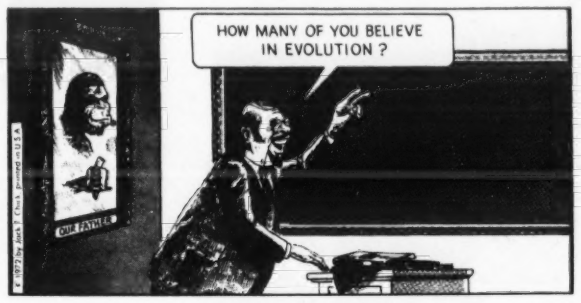
WITCHES AGAINST BURNINGS
Heretic's Journal
P.O. Box 12347, Seattle, WA 98111

Pagans against modern-day witch-hunts . . . of which there are still plenty. Many news reports & clippings on issues affecting freedom of religion; essays, reviews of anti-authoritarian interest but with a pagan slant. Quarterly magazine . . . FREE (but send a 22¢ stamp).

GROUPS YOU LOVE TO HATE —But they hate YOU even more!

IF THIS IS CHRISTIANITY, WHAT'S THE DEVIL LIKE??
Chick Publications
P.O. Box 662, Chino, CA 91710

Learn to HATE for GOD. These are those tiny, rectangular "Christian" comic books that grinning zombies hand you on the street — the ones with atrocious art and an almost prehuman level of sheer, unbridled hate, manipulating the lowest human religious instincts. Not exactly a "turn the other



cheek" philosophy. These have probably turned more people *off* to Jesus than any other Christian publication. If the Devil were looking for something to make Jesus look bad, this is it. Chick depicts, with all-too-revealing glee, the eternal suffering that awaits Jews, Catholics, unbaptized babies, people who cuss, and anyone else slightly less consumed with hate and fear than he is. Jesus would puke! These rank right down there with the craziest Nazi UFO rantings, yet to many ignorant racists, these are Truth. Terrifying. $5 for sample assortment of comics, and price list.

THE POPE IS SATAN
Tony Alamo
Box 398, Alma, AR 72921

Vicious anti-Catholic tirades with a schizophrenic flavor and the taste of rotten eggplants. A portrait of socially tolerated dementia in action, these brochures ooze with vindictive psycho-hate.

TO MY DEAR PERSONAL FRIEND . . .
Rev. Ewing's Church By Mail
Prayer Box 4574,
Atlanta, GA 30302

Exemplifies the lowest in money-grubbing for God. Rev. Ewing's mass-mailings are designed to fool the ignorant into thinking they're getting personal letters; everything is printed to look like felt-tip handwriting on notebook paper. Crossed-out 'mistakes' are even included to complete the air of authenticity. You get either a Prayer Cloth (made of paper) or a little bottle of Miracle Annointing Oil, for which you're expected to tithe half your income. Many do.

WEIRD POLITICS

If you want ordinary right-wing megalomania or left-wing teeth-gnashing, go to any extremist bookstore. Those listed here are too far outside the boundaries of the normal political spectrum to be available in stores.

WHAT HATH THE ILLUMINATI WROUGHT?
Conspiracies Unlimited *P.O. Box 3085, St. Paul, MN 55165*

Each issue covers different conspiracy theories. It's a tangled world of espionage and black magic out there and keeping up with every group out to control your thoughts is an exhausting job. Send $5 for *huge* sample package. Incredible collections of extremist thought from this dimension and others.

A MODEST PROPOSAL
Patriotic English Tracts
BM Bozo,
London WC1N 3XX, England

Many little booklets so extreme that one would like to think this was all just a particularly well-done satire. If only! Must be seen

to be believed. THE FANATIC ($4) is a larger publication, chock full of the finest kook literature available. Especially if you're a subject of the U.K., you'll pray that it turns out to be just a joke. Send $3 in international money order for catalog, sample tracts.

REAGAN, THE MASONIC JEW CATHOLIC TOOL
Christians Awake
P.O. Box 3513, West End Station, Birmingham, AL 35211

"*All* politicians are beholden to the power of Freemasonry." Reagan isn't "right" enough; in fact he and his Jewish Communist buddies are to blame for AIDS, revolution, murder and abortion. Even Jesus is the Antichrist . . . half the time. "The people are blinded because they have partaken of the leaven of the Pharisees." One issue went into endless detail showing how the mathematical dimensions of the Washington Monument prove that it is a phallic symbol erected by Masonic Jews and Catholic devils. Ask for sample.

PACK YOUR BAGS
Spiral Feedback
P.O. Box 80323,
Lincoln, NE 68501

President Reagan is about to put almost everybody in concentration camps. The legislation is already on the books — a secret proposal to silence all patriots trying to restore the Constitution. Time is running out; a "National Emergency" is about to be declared. The only problem is, just subscribing to this publication puts you on the government's target list! Only 10¢ per copy of this flyer.

THE SIMPLE ANSWER TO ALL THE WORLD'S PROBLEMS
Little Free Press
Rt. 2, Box 136 A,
Cushing, MN 56443

The most idealistic, naive set of pamphlets in our Archives. The

author's plan for total world utopia involves, simply, everyone working for nothing; all competition would be abolished. Work without pay — is that too much to ask? It's a pathetic halfway measure, though. We'd still be *working*. Otherwise, it might be a great idea . . . on some other planet, using some other race besides humans. Free, of course.

WELL, ANYONE CAN MAKE MISTAKES
Anti-Authoritarian News Network Bulletin *P.O. Box 915, Stn. F., Toronto, ONT. M4Y 2N9, CANADA*

Great collections of clippings from newspapers illustrating miscarriages of justice — stories that are embarrassing to governments and courts. Also much Greenpeace and animal-rights news. $10/yr; 75¢ sample.

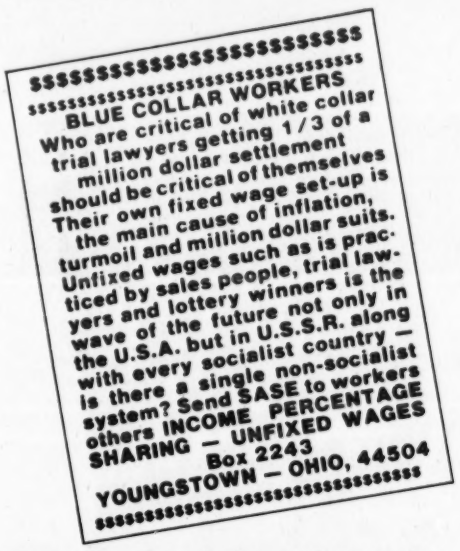
FIGHTING FIRE WITH WATER
Adventures in Subversion
Anti-Authoritarians Anonymous, P.O. Box 11331, Eugene, OR 97440

Deserves a Pulitzer Prize. A book-length collection of the hard-hitting posters and handbills created by the A-AA. Many are collages of corporate ads, modified 'in a spirit of destructive playfulness' to reveal their *true implications*. Every page is suitable for framing, or, better, for reprinting. Price? I don't think they have a price. Send at least $2, though.

THE WAR OF DREAMS

. . . AND WHEN I WOKE UP, I KNEW EVERYTHING!
Brainbeau
Box 2243, Youngstown, OH 44504

"The World's ONLY Radical." Inexplicable. One sees Brainbeau's crazy little ads in all sorts of oddball publications. You send for information, and you get more crazy little ads — pages and pages of

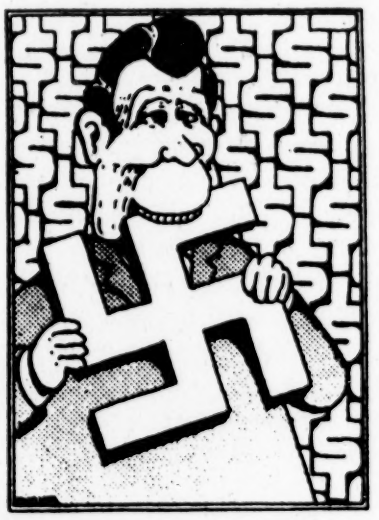


them. But the ads themselves each bear a different plan for a new world order — a world of Brainbeau! His name alone says a lot. Text of one ad: "What makes criticism of my solutions go in one ear and out the other is the knowledge that I'm probably the sole possessor of a mind-changing W.W.II jeep accident head injury incident that involved eradicating previously held beliefs and substituting others via a round-the-clock me-to-me talkathon. Forty-one years later I'm still talking to myself." Send SASE and he'll talk to himself to you! A true "free spirit."

RECRIMINALIZE SEX!
Ladies Against Women
1600 Woolsey St., Box 7, Berkeley, CA 94703

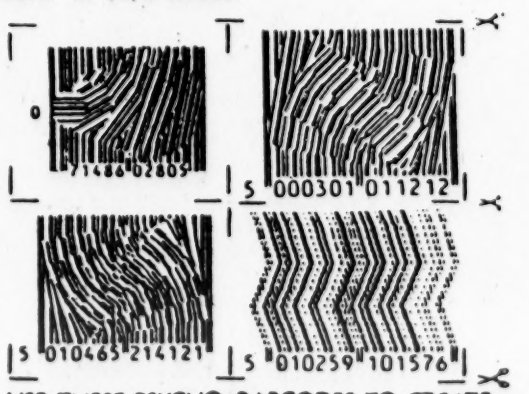
A travelling troupe of comic agitators disguised as the ultimate Moral Majority-type "ladies auxilliary." Pummels the concept of the submissive housewife to death, by savage mimicry. Not a one-joke idea, but a great vehicle for powerful satire that hits far and wide. A selection of slogans from their buttons and bumperstickers: Ban the Poor! Make America a Man Again — Invade Abroad! Abolish the Environment — It Takes Up too Much Space! Protect the Unconceived — Sperms Are People Too! You're Nobody 'Till You're Mrs. Somebody! Procreation, Not Recreation! This group is not only brilliant, but courageous; they show up at Phylis Schlafly rallies and upstage her.

(The best part is that Schlafly herself admits she doesn't "get" the joke!) They're veterans of the acting combat zone — I once saw them stay in character while being physically attacked by angered fundamentalists outside the Reagan-Falwell Prayer Breakfast at the Republican Convention in Dallas. You can become a member and receive bumper stickers, aprons, buttons, and a newsletter that is funny while also describing other people's worthy political projects. Send SASE for info; $15 membership.



ONE STEP BEYOND POLITICS
Popular Reality
Box 1593, Kalamazoo, MI 49005

Of the many radical/anarchist publications, this modest little tabloid is one of the few that displays any sense of humor at all. Very funny slams not only at the Establishment, but at so-called "anarchists" and pop-radicals as well. A bargain at the price: 50¢ each or $2/6 issues.



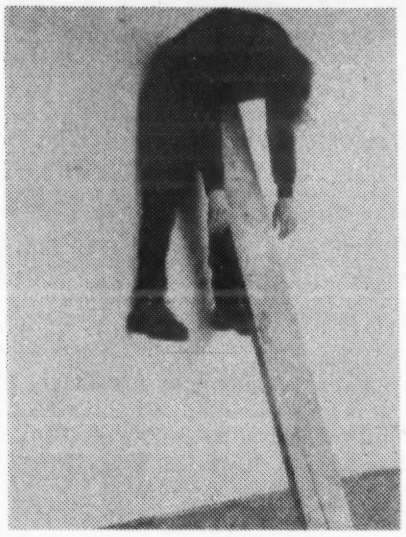
WEIRD ART

You'll notice the term "collage" cropping up a lot in this section. Now that most existing art genres have been bled dry, many artists are chopping up and distorting older works, modern day ads, and anything else they can find, recombining them to create something startling. It's the art fad of the 80s, and while most of it is randomly juxtaposed trash by poseurs, the "zines" listed here are hotbeds of the good stuff.

Giant holograms will become our new national parks.

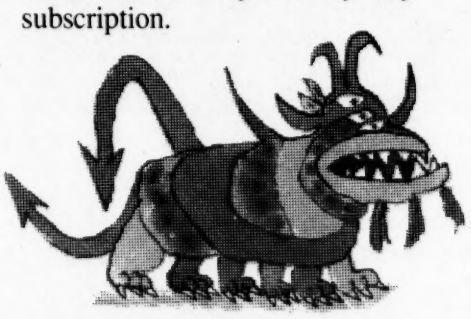
???????
FOOL, Journey into the Worlds of Tomorrow, and (indeciferable title)
Seth Deitch, 534 Revere, Revere, MA 02151

Probably the most *inexplicable* publications in existence. Completely nutty scientific art books by Dr. Ahmed Fishmonger, a reclusive crank whose writings and accompanying collages are practically impossible to decribe, because nothing about them makes any sense whatsoever. Nothing. Trying to figure out where the illustrations originally came from could drive one to madness. Leave any one of these publications on the coffee table for friends to find and watch their expressions as they thumb through, striving vainly to find an explanation, to find any thread that might connect them to reality. Not sloppy nonsense like 99 percent of the amateur collage-zines being done these days, but works of *classic* inscrutability. No price; you have to send "something very strange" in order to get these.



BLEED FOR YOUR ART
High Performance
240 S. Broadway, 5th Floor, Los Angeles, CA 90012

No, it's neither a car nor drug magazine, but an absorbing quarterly review of the freakish world of performance art. Some of today's most "Now" art is by people using their own bodies and behavioral quirks as the canvas. One guy hangs himself in the air on dozens of little hooks through his flesh; another grows grass on cars and clothes; others make machines that tear each other to pieces. Some invent new languages; others tear themselves apart onstage. Read about this happening movement now, while it's still happening, before the artists kill themselves off. $5 sample, $12 yearly subscription.



KIDS WILL LOVE IT
Rotten Island
David R. Godine, Publishers, Inc., 306 Dartmouth St., Boston, MA 02116

A children's book about a land where everything is as bad as it could possibly be. Mind-bending ugliness for tots. "It had acres of sharp gravel, and volcanoes that spat poison arrows and double-headed toads . . . There was an earthquake an hour . . . There was no shortage of anything ugly. All these horrific creatures dined on one another . . . They lay on hot embers dreaming up new ways to hurt, or planning how to get even for something that never happened." Helps to prepare youngsters for real life. Available in many bookstores.

MORBID YUKS
False Positive
Out-of-Kontrol Data Institute, P.O. Box 432, Boston, MA 02258

Eclectic collections of fine collage art, reprints from strange paperbacks, fanatical religious harangues, you name it. Different themes each issue; the "kooks" is-

sue, #2, featuring quotes and clippings from mags like those described in this article, was so popular that it has become a regular feature. $3 each or $8/ 4 issues.

WEIRD MISCELLANEOUS

YOUR MOTHER IS THE SON OF YOUR ANCESTORS WHO HAVE NIPPLES LIKE TURTLES!
Maledicta
331 S. Greenfield Ave., Waukesha, WI 53186

Every foul epithet ever hurled by man, woman, beast, or thing, in any language, anywhere in the world, will sooner or later be covered, in depth, by these schol-

arly and erudite researchers. Expensive, but the historical material is incredible and CAN'T BE HAD ANYWHERE ELSE. The cussing of a culture is its esophagus down which you can peer to check its health. But you gotta be careful what it gags back up at you. $25/issue.

OH, LIKE, WOW MAN — TRAILS!
High Frontiers
1201 Masonic Ave., #A,
Berkeley, CA 94706-2329

Hell of a street address for a high-class drug magazine! Mainly for acidheads. Great drug trip recountings, psychedelic art. The good old days. Giant-format pages; $6.50 each.

(Which reminds me. I would like to compile a horror book of true-life drug experiences. Send a written acount of Your Worst/Funniest drug trip to me, Rev. Ivan Stang, at The SubGenius Foundation, P.O. Box 140306, Dallas TX 75214. This will be the ultimate scare book to keep kids off drugs, and a million laughs to those already too far gone to be helped.)

CATTLE MUTILATIONS
Stigmata and Crux
Project Stigma, P.O. Box 1094,
Paris, TX 75460

The only continuing report, and very well researched, on the disturbing epidemic of mysterious livestock mutilations. Reports from all over the world, assembled with a minimum of editorializing. There's still no explanation, although earthly helicopters manned by some secret group seems much more likely now than the UFO theory. You think cattle mutilations are a joke? There have been something like 20,000 since 1960, most of them **hideously weird.** $3 each for Stigmata newsletter; $6 for Crux (yearly journal)

HILARITY

ABSURD NEWS
View From The Ledge (clippings)
Deadfromtheneckup, Inc.,
P.O. Box 57141,
Washington, D.C. 20037

"Man Loses 5 Fingers to Saw — Dog Eats One." "Woman Wins Award for Fall Off Toilet." Brilliantly selected clippings and news articles, all illustrating that this is, indeed, an insane universe. You'll hardly be able to disagree . . . and it's all true! You get it in return for contributions of weird clippings.

CHEWY FOOD FOR THOUGHT
The Perfect Pitch
Bob Marshall, c/o CKLN-FM,
380 Victoria St., Toronto,
CANADA M5B 1W7

Collections of startling quotes — many from sources reviewed here. Some are transcriptions from radio broadcasts which wouldn't otherwise see print. A quirky cross-section of wisdom and kookdom combined.

NEW AGE SCAMS

BIGGEST MONEY DISCOVERY SINCE THE INDUSTRIAL REVOLUTION
Neo-Tech
P.O. Box 906,
Boulder City, NV 89005

An up-and-coming new "Instant Riches Through Self Help" scam. It's fun to read the free info and imagine the kind of gullible, sad wish-they-were-Yuppies who fall for it. "Scientific Method" for prosperity makes every situation a *winnable* situation.

FACTS CONCERNING YOUR MISSION
RI Research
949 Broadway,
New York NY 10010

"You Are A Beyonder." And you have been CHOSEN for success, happiness, prosperity, because you "UNDERSTAND" that your fate isn't governed *only* by the stars. New Age motivational *garbage.*

SOURCES FOR MORE OF EVERYTHING

Factsheet Five
Mike Gunderloy, 41 Lawrence St.,
Medford, MA 02155

Almost 70 pages of reviews much like these, sent out on a quarterly basis. Much of the small magazines and books covered in Factsheet Five are sci-fi fanzines, punkzines, anarchist newsletters and dime-a-dozen amateur art and poetry magazines, but if you can hack your way through all that, there are plenty of great new cult and extremist listings to be found. Editor Mike Gunderloy has been faithfully cranking out this useful directory of outcasts for years . . . a readable, dependable source for sources. $2 each.

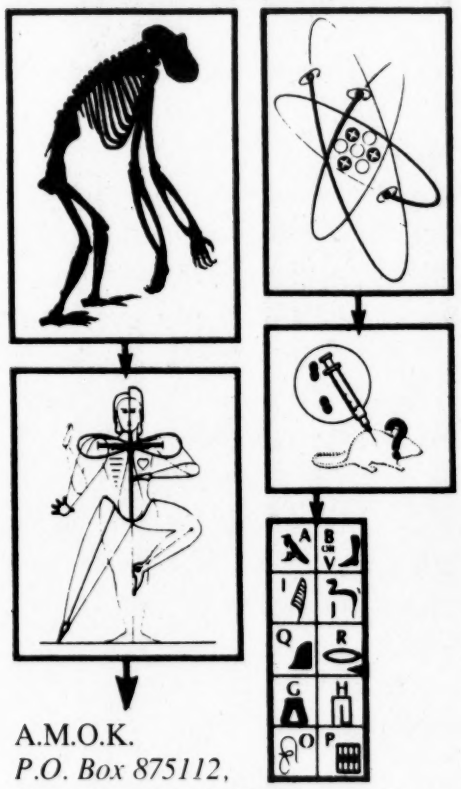
Funhouse
Lang Thompson,
2111 University Blvd. E., Apt.33,
Tuscaloosa, AL 35404

Much smaller version of Factsheet Five; more oriented towards experimental audio, but still covers a lot of ground. $1 each.

Spectrum
Jim Corbett, 762 Avenue 'N', S.E., Winter Haven, FL 33880

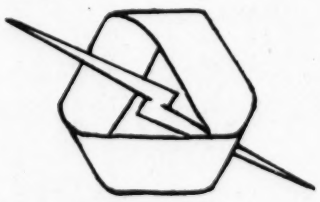
A 60-page listing of addresses for vast numbers of political and religious organizations, most of them extremist, most of them somewhat right-wing . . . but the term "right wing" doesn't really mean much anymore. Categories like anti-tax, anti-fluoridation, right to life, alternative energy, etc. It's impossible to keep the bigots and hate groups out of a list like this. $8.

GREAT CATALOGS



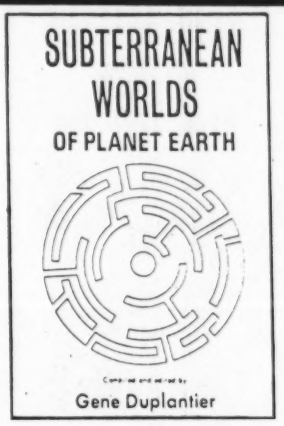
A.M.O.K.
P.O. Box 875112, Los Angeles, CA 90087

Secret societies. Situationists. Illuminati. UFOs. Surveillance. Satanism. Psychedelics. Magick. Surrealism. Quantum physics. Freaks. Murderers. Kitsch. Etc. The complete library of hip weirdness. $1.



Rex Research
P.O. Box 1258, Berkeley, CA 94704

Sells reprints of technical papers about neglected inventions of all kinds. Many old studies on bio-energetics, unusual motor designs, forgotten doohickies and energy generators that may yet turn out to be the ones that save our planet.

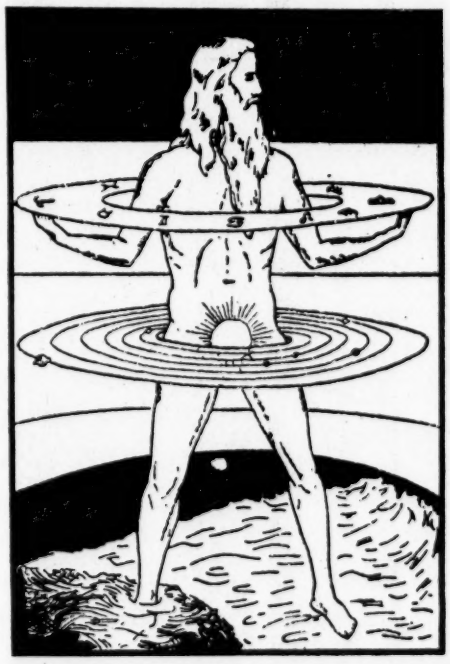


SST Publications/DELVE Magazine
Gene Duplantier, 17 Shetland St., Willowdale, ONT., CANADA M2M 1X5

Great $1 catalog of UFO books; titles like The Martian Alphabet, Secrets of the Popes, Hollow Earth at the End Time. (Many hard-to-find hollow earth books here.) Fantastic source for books by contactees.

Info Unlimited
Box 716, Amherst, NH 03031

Amazing Devices! Laser guns, high voltage plasma generators, ion generators and detectors, particle beam weapon supplies, surveillance devices, geiger counters, stun guns and phasors, fireworks and pyrotechnics, and many how-to plans for even more sinister and useful gadgets.



Health Research
P.O. Box 70, Mokelumne Hill, CA 95245

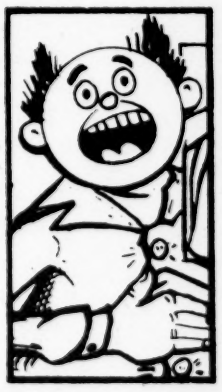
Health Research sells over 900 self-published books on the occult, alternative health, UFOs, arcane science. Many are old books on which the copyright has run out — esoteric in their time, impossible to find now. So voluminous is their selection that they publish *two* catalogs — one on the occult and one on health, $2 each.

JES' FUN

X-RAY SPECS
The Fun House
P.O. Box 1225, Newark, NJ 07101

You know those ads that used to be in the back of comic books for all manner of stupid gags, magic tricks, novelties, etc.? Stinky-Gum, Fake "Live" Vomit, Sea Monkeys, Whoopie-Cushions . . . 80 pages of it, free.

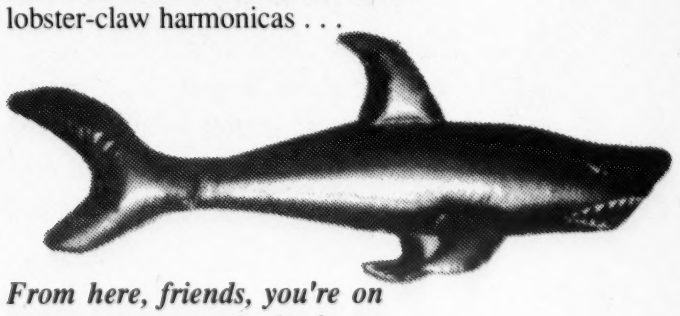
MORE CHEAP JUNK
Johnson Smith's World of Fun
35075 Automation Drive, Mt. Clemens, MI 48043



Catalog full of stupid gimmicks like Mystery Kites, LunaBalls, Ah-OO-Gah horns, monster and Reagan masks, giant bow ties, Bag o' Horrors, magic spy viewers, squirt toilets, talking cigars, trick bras, etc.

PEE WEE'S HOME DECORATOR
Archie McPhee
Box 30852, Seattle, WA 98103

Great selection of odd toys and decor — lawn flamingos, fake rocks, duck hats, rubber dinosaurs, lobster-claw harmonicas . . .



From here, friends, you're on your own . . . and who knows who'll be watching you once some of these people start sending you mail? . . . Heh heh heh . . . ■

Backstage with "BOB"

Is the Church of the SubGenius the Ultimate Cult?

by Jay Kinney
Artwork by Paul Mavrides

SCIENTISTS AGREE EARTH TIME IS SHORT!!!

It's 9:30 or so, backstage at the Stone, a nightclub on Broadway in San Francisco. Guy Deuel, the ex-cattle rancher from Bolivia with the artificial septum, is fondling an Uzi, the Israeli automatic weapon favored by death squads in Central America. The Uzi — like the ridge between Deuel's nostils — is plastic. Deuel, who is an imposing fortyish figure in a tan trenchcoat, looks uncannily like G. Gordon Liddy and has the air of a man who is no stranger to life and death situations. Deuel is a SubGenius.

Out front on stage, Janor Hypercleats is stalking back and forth across the stage delivering a hell-raising sermon to an audience of several hundred souls. Janor mows lawns for a living in Little Rock, Arkansas, and cuts an odd figure in his garish orange and green pants, looking like the penultimate hick come to the big city. It is not totally clear just what Janor is raving about in his Little Rock twang — something to do with "Launching the Head," golfing, "BOB," Heaven, and his sex life or lack thereof. But that hardly seems to matter. Janor is a SubGenius.

What has brought both Guy and Janor to San Francisco in the damp chill of November, 1985, is the chance to participate in the SubGenius Devival, a one-night-only extravaganza offered to both the general public and to devoted members of the Church of the SubGenius. There are bands from San Francisco, singers and preachers from Dallas, an intense character in shades from back East who calls himself "the Pope of All New York" and a smattering of artists, go-fers, and borderline basketcases.

In an era of designer jeans, designer drugs, and designer cigarettes, it was probably inevitable that someone would establish a designer Cult — in this case one whose members keep redesigning its contours on an almost daily basis. SubGenii may be brainwashed — one need only listen to an hour of drool-flecked conversation about X-ists and "BOB" and Wotan to arrive at that conclusion — but contrary to every other cult on the horizon the SubGenii are busily washing their own brains. If there is a "Mister Big" pulling strings from behind the scenes he stays very well hidden indeed. Of course, there *is* the nagging question of cult-founder J.R. "BOB" Dobbs — a shadowy figure in the tradition of L. Ron Hubbard and Howard Hughes — but Dobbs' death in early 1985 brought a halt to any efforts to centralize control of cultmembers within a rigid hierarchy.

What remains may be scary or at least nauseating — the best estimates of SubGenius membership place the cult at approximately the same size as the forces of Lyndon LaRouche — but it is a decentralized phenomenon. As police departments around the country have learned, the threat that the average SubGenius represents is the danger of the lone berserker run amok, *not* the threat of lockstep fascism.

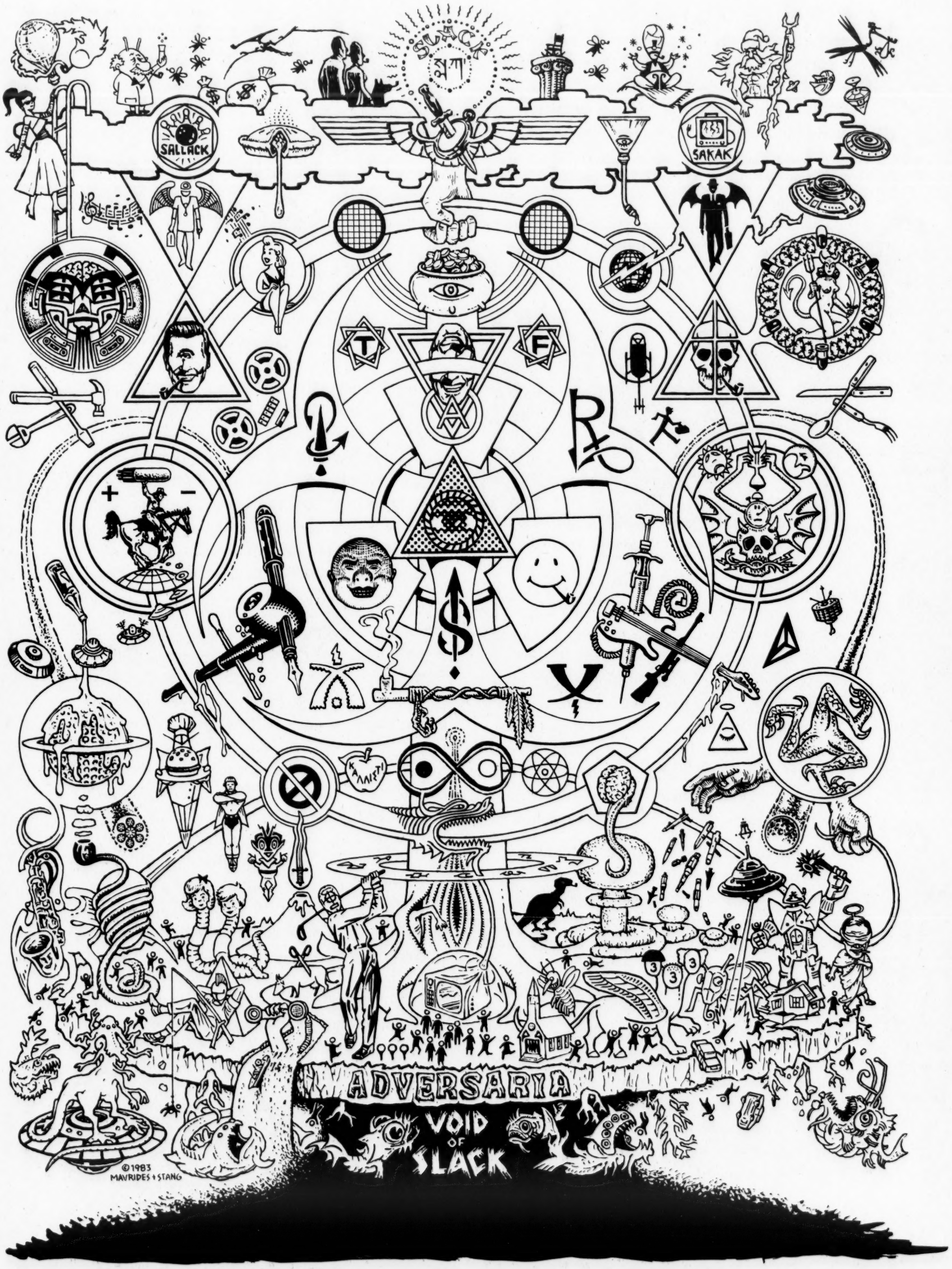
SubGenii are not interested in selling you flowers at airports. That is not SubGenius style. They are far more likely to sidle up to you in a public lavatory and pee on your shoes. *That* is SubGenius style.

The origins of the Church of the SubGenius are hazy at best. The earliest known nationally

HOW THEY DENY YOU SLACK

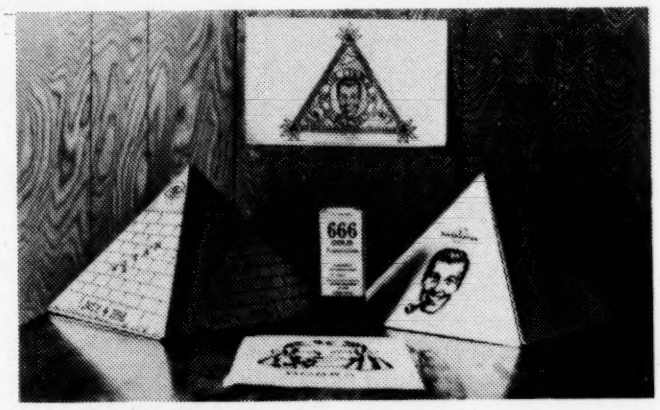
Jay Kinney is no stranger to regular readers of this magazine. A former editor and frequent contributor, he recently adopted the role of investigative reporter in order to research the mysterious Church of the SubGenius, one of the fastest-growing religions of the 20th century. In this article he brings to light some of this cult's enigmatic beliefs and history, which until now have been inaccessible to outsiders. —*Ted Schultz*

Artwork ©1983 by Paul Mavrides. Reprinted with permission from *The Book of the SubGenius*, McGraw-Hill.



A chart showing the complicated SubGenius cosmology and pantheon.

circulated Church literature bears copyrights dating no earlier than the late 1970s. But Church old-timers like Rev. Ivan Stang of Dallas date their involvement in the cult back to the late 50s. At that time the Church was a local Dallas-based group numbering no more than a couple of dozen members. Like other obscure fringe groups of that era such as the Science of Mentalphysics group in Yucca Valley, California, or the Mark-Age saucer-contactee bunch in Florida, the SubGenius Foundation, as it was then known, was a self-perpetuating organization clustered around a charismatic leader.



Jay Kinney

Cult accoutrements: meditation pyramids and over-the-counter drugs.

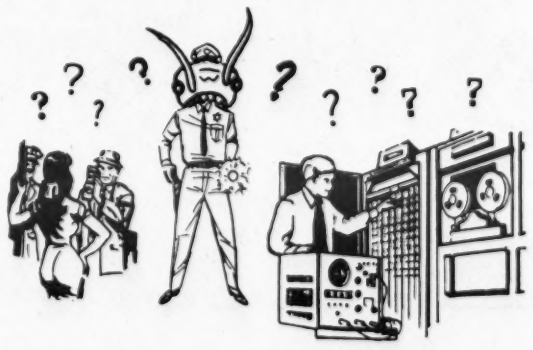
J.R. Dobbs (usually referred to as "BOB" by cult-members) founded the group following a speckled career as a bit-actor in C-movies and an extended stint as an aluminum siding salesman. Dobbs' success as a salesman enabled him to build up a sizeable nest-egg and put him on sure footing for convincing others of his sincerity. When Dobbs began to hear voices in the mid-1950s — voices he identified alternately as aliens (X-ists) and as a so-called Space God (Jehovah-1) — he wasted little time in developing a small but devoted following.

According to Stang, early SubGenius emphasis was on self-development (hence the group's name) and on Dobbs' eccentric political philosophy, which shared many elements with the far right ideology of Robert Welch's John Birch Society. Things might have stayed that way — just another small fringe group in a western state — except for a few unexpected twists in the SubGenius path. The first twist was Dobbs' serious extended love affair with LSD in the late 1960s and early 1970s. During this period the Foundation evolved into a Church and Dobbs' cluster of SubGenii went through an unsavory spell where experimentation with sex and drugs was *di riguer*. The second twist was the arrival of Dr. Philo Drummond in the late 1970s.

Drummond, who had prior experience in the public relations field and was a graduate of est, apparently saw much potential in the tiny Church and rapidly worked his way to a position of power second only to Dobbs himself. In league with Stang, who was

now No. 3 in the cult, Drummond introduced the use of "BOB"'s face on Church flyers and instituted a policy of heavy new-member recruitment. Public meetings in Dallas were publicized and began to draw sizeable crowds. Branches of the Church (called "clenches" in SubGenius parlance) spread to Little Rock and Austin. And perhaps most innovative of all, Drummond and Stang pushed for a policy of clench autonomy, both theologically and organizationally. As SubGenii proliferated, so did the gods and demons in the SubGenii pantheon. What had started as a monotheistic neo-UFO cult in the 1950s had transmogrified into a polytheistic grab-bag in the 1980s.

One indication of the new regime instituted by Drummond was the extensive use of false Church names in place of members' real names. Though Stang and Drummond's names were authentic enough, most post-1979 SubGenii took assumed names as part of their initiation into the cult. Janor Hypercleats and Sterno Keckhaver (both from Little Rock), Tentatively A. Convenience (of Baltimore), Pastor Buck Naked (of Dallas), Puzzling Evidence (of Oakland), Lies (of San Francisco), St. Byron Werner (of L.A.) — all sported transparently ridiculous monickers. This, in combination with the policy of making every cult-member a *de facto* minister, brought a surreal air of unreality to Church proceedings with Popes, Saints, and Reverends all competing for positions of power over each other. It also brought the Church to the attention of the FBI and IRS who were concerned that a new outbreak of mail-order ordinations, all claiming tax-exempt status, might lend further momentum to the growing ranks of the tax-revolt.



HOW TO FOOL THE AUTHORITIES

The SubGenius Devival is still going strong as the clock at the Stone hits midnight. Pastor Buck Naked has come and gone with his auto-harp songs about electrical devices embedded in his brain. Rev. Ivan Stang has stirred up the crowd with a ritual demonstration of Time Control consisting of sledge-hammering to smithereens the wristwatch of a trusting volunteer from the audience. Janor and Sterno have "Launched the Head." The Band That Dare Not Speak Its Name, a local aggregation of anti-musicians, has gotten the faithful to their feet with stinging anti-songs about "BOB." And now the evening is reaching a frenzied climax with the arrival of Rev. Meyer, "the Pope of All New York."

As a dry-ice mist rises from the stage, Meyer, accompanied by two armed bodyguards, stalks out to the podium and delievers a bellowing tirade against "pinks," MTV, Yuppies, personalized license plates, and "the Conspiracy." Meyer possesses an uncanny and disquieting charisma that local commentators have likened to that of the late Rev. Jim Jones. Back on his own ground in New York he has filled the trendy Danceteria to overflowing with several public SubGenius rallies. But here in San Francisco, a few doors down from Carol Doda's topless act at the Condor and across the street from the fourth generation mohawks at the Mabuhay Gardens, Meyer is just another late night act. Or so it seems to Meyer, who cuts his speech back to a mere twenty minutes and stalks off stage abruptly to a final explosion of applause, cheers, and

The Reverend Ivan Stang delivers a cable-televised rant from the Church's Dallas headquarters. Jay Kinney

weary table-thumping. The Devival is devolving and will shortly taper off into canned DEVO music and dancing.

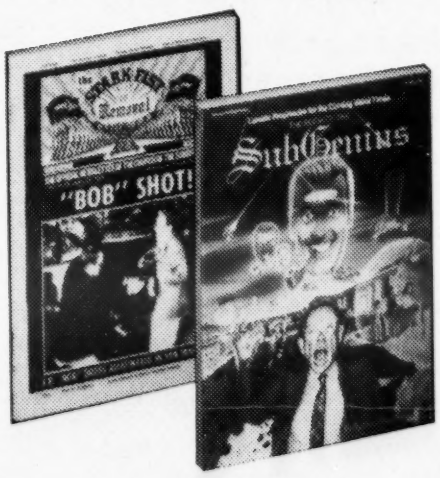
Perhaps the Church of the SubGenius is merely a harmless eccentric sect sprung from the same sun-baked environment that Jack Ruby and Lyndon Johnson both called home. Texas is the home of broad gestures and the SubGenii may be one of the broadest yet.

Yet one need only watch the glint in Guy Deuel's eyes as he cocks the Uzi in the dressing room and talks about "showing those pinkboys a thing or two" to realize that one man's meat may be another man's poison. The Church of the SubGenius has long since outgrown its humble roots and is stalking bigger game. Consider it all a joke at your own risk. ■

The Book of the SubGenius • The Stark Fist of Removal

This book is it *— the Bible of the Church of the SubGenius. The rationales, scriptures, iconic art, myths, personae, and pure unadulterated rants of this disturbed denomination can all be found therein. You may be shocked or mystified if you dare to dive in, but you won't be bored.*

The Stark Fist *is the Church's official (and more-or-less annual) newsletter. It averages 100+ pages of letters, art, reports, and clippings from hundreds of Church members around the world.* —*Jay Kinney*



The Book of the SubGenius
Rev. Ivan Stang
1983; 194 pp.
$9.95
($11 postpaid)

The Stark Fist of Removal
Rev. Ivan Stang, Editor
$3/issue

The SubGenius Foundation
P. O. Box 140306
Dallas, TX 75214

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Countless personal saviors!!! The SubGenius knows, bull-dadaistically, that each SubGenius should do WOTAN's work exactly as He reveals it to him, and that He has wildly varying messages for different people in different situations.

By the same token, it is madness to accept any one 'personal savior' — *even Dobbs* — as a permanent guide. Perhaps "Bob's" greatest invention is the concept of SHORT DURATION PERSONAL SAVIORS, or *"Shordurpersavs"* in Tibetan. The true Sub accepts into his heart, as his own *personal* savior, anyone or anything with which he happens to be impressed *at the moment*. Shordurpersavs change from hour to hour, from whim to whim. It could be the hero of a movie you just saw, the author of a book, a bottle of Thunderbird, a good pal, a dog, a sex object. Not professional gurus you are locked into believing, but temporary ones according to the need of The Now. They change so fast that it never gets embarrassing; you aren't inclined to 'proselytize' them off on disinterested others who will later laugh at you; you know their effects will wear off in minutes — although the very idea is unthinkable while under the Influence. One need not mention them at all — a superb Tenet, since one is sometimes *deeply ashamed for having a particular, unsavory Shordurpersav: some* can be Personal Saviors and False Prophets *at the same time*.

As said before, *SLACK* is a trickster.

—*The Book of the SubGenius*

Same Channel,

by Stanley Young
Illustrated by James Donnelly

JAMIE SAMS, A FORMER COUNTRY AND WESTERN SINGER who sighted a spaceship four and a half years ago at a baby shower in Pasadena, California, is about to go into a trance. About forty people of varied ages sit expectantly, hushed, almost entranced themselves as Jamie's head nods onto her chest. Then she shudders, jerks upright, leans to her left, presses the record button on the cassette recorder beside her chair, and turns to face the audience.

"Good Evening!" she declares in a voice that sounds very much like an English Victorian matron. Her eyes have a slightly glazed look, and the unchanging smile on her face betrays no emotion.

"Good evening, Leah!" many of the audience intone. Leah is a sixth-density entity from the planet Venus six hundred years in the future. Jamie-Leah responds enthusiastically to the welcome. Her head moves abruptly from one side of the room to the other, the mask of her smile never changing.

Tonight Leah has come to talk about "The Starseed Connection." Apparently, some of us are from the stock of offspring spawned from the union of extraterrestrial beings and human mothers hundreds of thousands of years ago. Leah requests us to close our eyes and recapture

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In case you haven't noticed, there's a genuine psychological/sociological phenomenon afoot. Though nothing new, the "channelling" craze has grown enormously in occult and personal-growth circles in recent years, coincident with the popularity of the best-selling Seth *and* Messages From Michael *books. A plethora of workshops, books, and newsletters proffer the pronouncements of ultraterrestrial entities on matters ranging from the metaphysical to the mundane, "channelled" through earthbound human mediums. New Age magazines contain scores of ads for medium-advisers, as well as for otherwise normal businesses like ad agencies that promise the additional enticement of channelling employees!*

Intrigued by such an ad for a New Age "channelling singles" workshop, Los Angeles-based writer Stanley Young decided to attend a few channelling sessions and meet some of the mediums and entities for himself. —*Ted Schultz*

Next Week Spiritualism Sweeps the Suburbs

the sense of memory of "some other place than this planet" — our original homes. She has us turn our eyeballs up — "just a little bit" — towards the front of our brains and ask, "Where is home? Show me home." The room goes still, and while the audience sits remembering, Leah-Jamie smiles from her chair, motionless save for her thumbs, which move in rapid and continuous circles about the index fingers of both hands resting in her lap.

About a third of the audience had visions. One man saw a crystal waterfall city; Leah tells him he came from Daltron, the seventh star of the seventh sister within the Pleiades system. A woman says she saw pyramids and three suns — "a planet from the star system of Sirius" claims Leah. Prismatic colors, desert landscapes, oceans, domed cities gave proof of provenance from Zeta Reticulae, Maldek, Orion, or even from the elder race who had once inhabited our own planet eons ago. One woman, however, is distraught. "I didn't see anything," she explains, "but when I heard the word 'home' . . . I just wanted to go home . . . I just wanted to cry."

Years ago, the setting would have been chintz, red velvet, ouija boards and a wet afternoon. The audience tonight, however, is comprised of casually dressed Californians, the setting is a Unitarian church, and the evening is part of an eight-week "Channelling Network Sampler" put together by Mix and Match, a singles organization.

Shirley Maclaine's best-selling book *Dancing in the Light* has made the notion of channels generally acceptable to the public, and many believers have come out of their closets. Trance mediums such as Jamie and entities such as Leah are, if not yet chic, certainly an accepted part of life in suburban southern California.

In Malibu, for instance, Ron Scolastico, Ph.D., aligns his awareness to "the Guides," who are, according to his promotional literature, "a source of apparently unlimited transpersonal knowledge and spiritual guidance." In Dr. Scolastico's latest release, *A Spiritual Look at the News* ($16 including postage and handling), the Guides "help us understand the hidden forces at work in world events," including possible past-life connections between Reagan and Qadhafi. In answering the questions, Dr. Scolastico (his doctorate is in humanistic psychology) appears to use his own voice, and, unlike Jamie, does not seem to undergo a personality transformation.

Across town in North Hollywood at Margo Chandley's house, every Monday and Tuesday evening Darryl Anka, a 34-year-old special effects designer, channels Bashar, an entity from the planet Essassani which forms a triangle with earth and the star Sirius. "Two thousand people have attended these channellings," explains Chandley, a former dramatic arts instructor, "and they *all* say it's not like listening to a human being."

Chandley is currently completing the research on a doctoral dissertation in Transformational Psychology at the International College, Westwood, California. Her thesis is entitled *A Psychological Investigation of the Development of the Mediumistic Process in Personality Function,* and her case study is a close friend, Shawn Randall. Five years ago, Randall reluctantly accompanied Chandley to a class on mediumship held by Dr. Peebles (a 17th century Scottish doctor channeled by Thomas Jacobson). Randall was the only one of her class of 16 to succeed in channelling an entity — Torah, an interdimensional consciousness who had come to speak about relationships. Today she teaches five classes a week in mediumship.

Chandley sees mediums as "laboratories of the mind, pioneers of the new integrated personality." And after interviewing dozens of mediums, she has also begun to detect similarities among them. Almost all came upon their gift to channel out of the maelstrom of a personal crisis. They are uniformly of above-average intelligence (many, like Scolastico, are professionals) and most were raised Catholic. Almost all of them were abused or neglected as children. "If everyone continually makes fun of you, it's easy to escape sometimes into a trance," Chandley points out.

There is definitely something powerful, and — well, *entrancing* — about watching someone transform themselves into a different personality before your eyes. It is this theatrical element (closer to performance art than stage acting) that is crucial in the current popularity of trance-mediums. "We're more apt to listen when we're being entertained than being talked at," explains Chandley.

Yet it is also the theatrical element that brings down the classic cry of "charlatan" from the

Stanley Young

(Left) Jamie Sams, former country and western singer. (Right) Leah, a sixth-density entity from the planet Venus, brought to you by Jamie Sams.

mediums' detractors. After all, many of these people earn their living — often a handsome one — from their public appearances, private sessions, tapes, videos, and assorted publications. A five-day workshop with Dr. Scolastico and the Guides in Malibu costs $750; a phone reading or a question by proxy (mail) which generates a 90-minute spoken answer is $135.

IF WE LEAVE ASIDE their galactic origins, the presaged cataclysms, mother ships, and other trappings of UFOria, the various messages of these mediums have a common theme: In order to change your reality, you must first change your belief systems. In one way or another, these entities are saying we have total control over our destinies, and if we're unhappy, neurotic, impoverished, irradiated, or dying from AIDS, then it is because "your beliefs, your emotions, whatever is strongest within you . . . created the reality you experience."

"It's like a new religion, a 'non-religion' with no credo, no fixed affirmations or principles. They teach that you have to accept *yourself* as savior," claims Chandley. "They seem to take feelings of low self-esteem and empower those who are listening."

This message is frequently obscured behind a cloud of extraterrestrial techno-babble. Newcomers would be advised to peruse the *Channeled Dictionary of Metaphysical Terms* that Bashar has provided before attending a session with him. Not all his definitions are as impenetrable as this one for *quark:* "The first step on the other side of the doorway of non-physical physicalness . . . that reflects the vibrational matrix of what we call the template equation on the non-physical side." However, Bashar's communications are peppered with words such as "mentality," "linear time-tracks," and "vibrational patterns," and he displays a decided penchant for adding "-ness" to gerunds, creating words that sound like translated Heideggerian constructs — "doingness," "knowingness," or "beingness."

Many of these terms have become common parlance no matter what time, star system, or planet the channeled entities claim as their origin. The followers of the popular mediums now bandy these neologisms about with abandon. The question is, are they developing a jargon or a liturgy?

There are Gnostic elements, there are traces of *est*ian existentialism, and there is more than a soupcon of Christianity in this New Age cocktail. Some, seeking solutions, find an evening with one of these new mediums to be only an entertaining aperitif; others drink deeply of the elixir and claim to have found an antidote to civilization and its discontents.

These mediums serve as role models for their followers, for they have learned to cope with difficult personal experiences, and to turn their abuse, rejection, and alienation to their own ends. "We must all carry within ourselves that portion of us that does not judge," Leah explained to us toward the end of the evening. "If you find that the world about you is going quite mad, then send love to the madness. It will diminish."

These are the wounded healers of modern times, 20th-century shamans who have, as W. H. Auden put it, "made a vineyard of the curse." And it is a vineyard whose vintage can be lucrative indeed. To all of you out there who have, at one time or another, heard voices: Take heart. ■

DO TABLOIDS TURN HOUSEWIVES INTO ZOMBIES?

Librarian reveals all . . .

by Michael H. Randall

FEW PEOPLE in the United States who have passed through a supermarket checkstand have been able to escape noticing tabloids, those small, newspaper-like publications filled with stories of the odd and the sensational. Probably just as few people have never looked inside one of these publications. After all, how many people do not feel some interest in a titillating celebrity scandal or the New Candy Bar Diet? Beyond this casual sort of interest, readers buy over 14 million copies of tabloids every week, and tabloids generate over $380 million in revenues each year. But, despite their phenomenal popularity, the tabloids are reviled and shunned by journalists, critics, and even celebrities, accounts of whose activities provide most of the tabloids' editorial content. The tabloids lack credibility even among their readers; polls show that 75 percent of all readers (the average is a female, age 37, with a $23,000 median household income) do not believe what they read in the tabloids.

Such attitudes are unfair to the extent that they constitute an indictment of all tabloids. While the past (and some current) practices of tabloids have bordered on the underhanded and sleazy, not all tabloids today resort to outright prevarication in their articles to boost sales. In fact, at least one of the tabloids now employs rigorous fact-checking procedures to verify each story before publication. Another tabloid regularly holds seminars for its editors to help them guard against publishing potentially libelous articles. Presumably, these developments have been in response to the flood of lawsuits that have been filed against the tabloids by allegedly libeled celebrities.

Tabloids include numerous service-oriented features on topics of benefit to their readers. They also perform a vital service for the entertainment industry. In fact, this industry probably could not function as it does without the tabloids and their wide publicity value for celebrities and entertainment productions. One writer for the tabloids claims that many entertainment personalities and their publicists make a habit of using the tabloids to further the stars' careers, while publicly denying that they would ever consider doing so.

Although the tabloids are highly popular, as is evidenced by their huge circulation figures, they are faced with strong competition. Tabloids must compete not only with other celebrity-oriented publications like ***People*** and ***Us,*** but also with television programs focused on personality news and gossip. Perhaps this competition explains why, in 1983, all four leading tabloids showed decreases of up to 6.7 percent in total circulation. But tabloids

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Kevin Kelly and I share a subscription to the Weekly World News*; articles like "First Successful Human Head Transplant!" and "I Had a Space Alien's Baby!" give us some hearty bellylaughs. No doubt the* WWN *staff enjoys similar bellylaughs writing the stuff. Michael Randall, a University of California research librarian, here applies his investigative skills to this neglected realm of popular journalism, answering some of the questions about editorial and reporting policies that run through my mind whenever I scan the racks at the supermarket checkout counter. Unfortunately, even Mr. Randall's overly generous assessment places* Weekly World News *at the bottom of the list, with sorry implications for Kevin's and my literary refinement . . .*

—Ted Schultz

This article originally appeared in the Summer 1985 issue of Serials Review*, a library journal, and is reprinted here with their permission.*

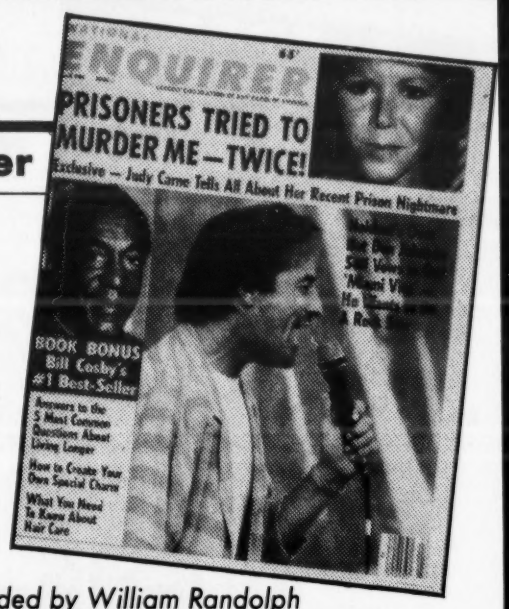
are still in a strong position to retain loyal fans and to attract new readers. This advantage is especially true of those leading tabloids that are entrenched in the coveted display racks located at grocery market checkstands. It is from single-copy sales at checkstands and newsstands that tabloids derive the great bulk of their revenue, a much greater share than other general interest consumer magazines. For example, in 1983 the *National Enquirer* derived 85 percent of its revenue from circulation (mostly single-copy sales). In comparison, *People* for the same period derived 46 percent of its revenue from circulation. This means that the tabloids are not so dependent upon the goodwill of advertisers, since advertising does not account for a large part of tabloids' revenue. Consequently, tabloid editors do not have to worry about stories and articles offending the conservative or squeamish tastes of big advertisers, as do most other general interest consumer publications. For this reason, the tabloids are free to publish stories dealing with topics that are popular with millions of readers: mysterious manifestations of the occult, exposes of the indiscretions and details of the deaths of famous people, flying saucer appearances, and eccentric and crackpot theories.

One of the tabloids' business methods that has been most criticized and yet is probably most successful is the use of checkbook journalism, the practice of paying money to obtain information for a story. A payment may range from $50 to a restaurant or hotel employee for a hot tip on a celebrity's activities, all the way up to $15,000 for exclusive details or photographs of a popular subject. For example, in 1984 a baboon heart transplant operation performed on a human infant who was identified only as Baby Fae drew tabloid reporters to Baby Fae's home town. There, the reporters allegedly circulated through the town, offering thousands of dollars for clues to the identity of the parents. One of the tabloids reportedly placed a local private detective on a $25,000 retainer to obtain information on the story.

This means of obtaining stories has given rise to a complex but effective reporting network. Staff editors and reporters are employed full time by the tabloids to work on assignments. Stringers, part-time employees situated throughout the United States and in other countries (many of whom also work as writers for local newspapers or other publications), are available for special assignments and may also produce stories on their own. Freelance writers and photographers, while they are not formally connected with their tabloids, know that they can easily sell a juicy story or photograph to a tabloid. And any individual who contacts a tabloid reporter with a lead for a story may be able to get a cash payment.

Following are comments on six widely available tabloids. These remarks may seem to err on the side of charity; however, it should be kept in mind that while critics may fault the tabloids for their sensationalism and extreme simplicity (reporters at one tabloid are told not to write anything that exceeds a fifth-grade reading level), these characteristics are the ones that endear the tabloids to millions of people.

National Enquirer



National Enquirer
Iain Calder, Editor
$19.95/year
(52 issues) from:
National Enquirer
Lantana, FL 33464
Circulation:
4,890,644 copies.

*The **National Enquirer**, founded by William Randolph Hearst, was first published in 1926 with the title **New York Enquirer**. In 1952, it was purchased by current owner Generoso Pope, Jr. for $75,000, reportedly with the help of gangster Frank Costello. Since then Pope has presided over the **Enquirer's** growth into the nation's most popular and notorious supermarket tabloid. Much of its current success is due to Pope's move in the early 1970s to establish his publication in the middle class magazine market by placing the **Enquirer** in grocery store display racks across the country. Aside from this circulation strategy, the **Enquirer** cultivates its editorial content by paying a large army of reporters and editors the highest salaries in the tabloid field. While this practice may not result in writing that always measures up to the journalistic standards of a magazine such as **People**, it does allow the **Enquirer** to cover a broad range of topics, and it enables timely responses to events that often result in news scoops. For example, when Elvis Presley died in 1977, scores of **Enquirer** reporters were dispatched to Memphis. **Enquirer** money flowed freely in the town. One result was that a Presley relative photographed Elvis in his casket and sold the picture to the **Enquirer**. The issue with this picture on the cover sold the most copies ever of the **Enquirer**, 6.7 million.*

*Such sensationalistic tactics may repel some people, but sensationalism is the area in which the **Enquirer** most clearly excels. Millions of readers rely on the **Enquirer** to let them in on the details of the week's hot topics, and the **Enquirer** rarely lets them down.*

Sun

*The **Sun** offers a predictable array of stories and pictures covering bizarre events and famous personages. Readers of the **Sun** expect such stories as "He's America's Youngest Dad at Age 13" and "Caged! 2 Women Keep Rapist Prisoner for Five Years as Love Slave." Some of the articles show a semblance of redeeming value. For example, while the article, "Drunk Doctors Operate In Our Hospitals," is presented in a sensationalistic manner, it does alert readers to the problem of alcohol and drug abuse among doctors and nurses. Still, there is no question that the majority of articles appearing in the **Sun** are lacking in such redeeming value. "Strange Psychic Power of Cabbage Patch Dolls," a story recounting situations in which telepathic messages from the popular playthings saved human lives and averted tragedies, is more typical of the **Sun's** offerings.*

Sun
John Vader, Editor
$15.95/year
(52 issues) from:
Beta Publications, Ltd.
P. O. Box 11
Rouses Point, NY 12979
Circulation:
125,000 copies.

Star

Star
Leslie Hinton, Editor
$32/year
(52 issues) from:
News Group
Publications, Inc.
660 White Plains Road
Tarrytown, NY 10591
Circulation:
3,757,065 copies.

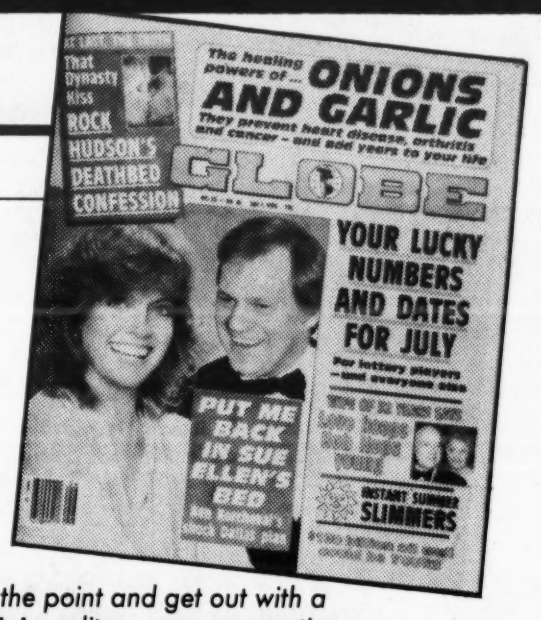
*The **Star**, founded and owned by Australian publishing magnate Rupert Murdoch, is a sister publication of **The Times** of London and numerous other newspapers and magazines owned by Murdoch. While the **Star** does not possess either the renown or the pretensions of **The Times**, it runs a respectable second in tabloid circulation to the **National Enquirer**. In fact, the appearance of the **Star**, with its color pictures, on the tabloid publishing scene in the 1970s prodded the **Enquirer** to adopt color and revamp its graphic design. The **Star's** formula is largely the same as that of the **Enquirer**, with the usual mix of celebrity stories and service features. An article playing up a spat between a television actress and her country singer husband coexists in one issue with a political analysis column. Other features include gossip columns, advice on personal finance, and recipes for dishes such as "Presidential Popcorn" (just add jellybeans).*

Weekly World News

*This tabloid is a reminder of the sleazy **National Enquirer** of the old days. It is, in fact, owned by **Enquirer** publisher Generoso Pope, Jr. It is the only tabloid reviewed here that is printed entirely in black and white, and its articles and pictures look like rejects from the **Enquirer**: "Ape Gives Birth to Human Baby," "Two-Headed Man Dies at Age 23." In addition to these and other stories celebrating the offbeat, there are several regular feature columns, including "Countessa Sophia Sabak's Weekly Horoscope," and "Dear Dotti," an advice column in which readers seek solutions to emotional dilemmas, and Dotti responds with straightforward answers such as, "Dump him," and "Take a cold shower."*

Weekly World News
Joe West, Editor
$13.95/year
(52 issues) from:
Weekly World News
Lantana, FL 33464
Circulation:
600,000 copies.

Globe



Globe
Mike Nevaro, Editor
$16.60/year
(52 issues) from:
Globe International, Inc.
P. O. Box 11
Rouses Point, NY 12979
Circulation:
1,983,009 copies.

*"Just tell the story, make the point and get out with a nice, snappy ending," **Globe** editors urge prospective writers. Owned by Canadian publisher Michael Rosenbloom, who also publishes the tabloids **National Examiner** and **Sun**, the **Globe's** format remains true to this editorial policy. As with all of the tabloids, celebrity stories and interviews, especially those revealing supposed scandals and embarrassments, are present in the **Globe** (previously titled **Midnight Globe** and **Midnight**). One such recent **Globe** article is "Dark Secrets of the Crystal Cathedral," in which the former daughter-in-law of a prominent television preacher reveals some of the more unflattering aspects of the video cleric's career. Stories describing unusual people and phenomena are also staples in the **Globe**. For example, readers can learn of the "Miracle Chair That Makes Women Pregnant," a piece of eighteenth-century furniture in the custody of a group of nuns in Naples.*

*In addition to these types of articles, the **Globe** also contains regular features, including special gossip columns covering Hollywood personalities and television soap opera peformers. Other recurring features include medical advice and news, "how-to" articles, and inspirational essays. And of course the **Globe** occasionally prints psychics' predictions, including this startling revelation: "Because of trauma, Michael Jackson will lose all his hair and will drop out of public sight while it regrows."*

National Examiner

*The **National Examiner**, like its sister publications, **Globe** and **Sun**, has sensationalism on almost every page. Articles on celebrities and unusual people and events fill each issue. Readers expect to be astounded by headlines like "'Man-Boy' Fathers a Child — at Age 7: Doctors Bewildered by Incredible Case History," and "Husband Burns Wife Alive . . . Because She Was Pregnant and Not Rich Enough." Social phenomena are not exempt from the **National Examiner's** sensationalism; for example, the headline of one article claims that "Women's Lib Causes Wife-Beating." (The article does contain some useful information on spouse abuse, but it also states that efforts to pass the Equal Rights Amendment have driven husbands to violence against their wives.)*

National Examiner
William Burt, Editor
$16.60/year
(52 issues) from:
Beta Publications, Ltd.
P. O. Box 11
Rouses Point, NY 12979
Circulation:
935,591 copies.

THE NEW COMICS

by Jay Kinney

ARE COMICS SOLELY "KID'S STUFF"? If you ask your average citizens this pressing question, they'll likely answer with an adamant "Yes!" — though a few fans of Doonesbury and Garfield may point to the funnies page in the daily paper as an exception to the rule.

'Twas not always thus. The first comic strips at the turn of the century were aimed almost exclusively at adults. *Mutt and Jeff*, one of the earliest strips, got its start in the S.F. *Chronicle*'s sports pages with jokes about horse racing. One-panel political and gag cartoons grew up in the 19th century in nonjuvenile humor magazines like *Punch*, *Judge*, and *Life*. More recently, when comic books as we know them got off the ground at the start of the 1940s, they found their largest audience in WWII servicemen.

It was only with the advent of television and the baby boom that comics increasingly came to rely on kids as their staple readers. This situation held for most of the '50s and '60s until the counterculture spawned the subgenre of underground comix aimed at hip adults. Undergrounds foreswore the voluntary censorship that kept other comic publishers locked into preadolescent markets. The results were, by turns, creative, jarring, entertaining, and offensive, and a significant number of underground artists and publishers have continued to produce unique works right up to the present. However, because of their emphasis on taboo-breaking, undergrounds have never captured a mass audience and likely never will.

It was left for a new wave of comics publishers — variously called alternative or independent — to yank comics up a notch in status. *Heavy Metal* magazine initiated the process in the mid '70s with its slick-paper reprints of comic stories from France (where comics have always had a large adult audience). Independent publishers such as First Comics, Eclipse Comics, and Fantagraphics have kept the momentum going with "graphic novels" (book length, softbound color comics) and a new spate of adventurous comic books especially aimed at comic collectors. These latter comics often closely ape the mainstream (juvenile) comics from publishers like Marvel and DC; the biggest sellers continue to be superhero stories. However, there are also a significant number of exceptions to the rule, the best independent comics being fully mature fare with no apologies.

The listings that follow are unavoidably incomplete. Given the turnover in new titles and in artists assigned to books, outstanding comics often have all-too-brief lifespans. Here are some that are flourishing as I write.

—Love and Rockets

Fantagraphics Books

*One of the smallest independent publishers and one of the most willing to take risks. Fantagraphic's leading publication, **Comics Journal**, has been arguing the case for better comics for years. Now with a growing line of unusual titles, publisher Gary Groth is putting his money where his mouth is.*

Love and Rockets

*Arguably the finest regular comic now being published. Written and drawn by the Hernandez brothers, **Love and Rockets** combines classic comic art with scripts worthy of Gabriel Garcia Marquez. Plus it has the best female characters in comics today. Seek this one out!*

Neat Stuff

Peter Bagge's gross, slapstick, and — yes — insightful comic strips about childhood and ne'er-do-wells.

Fantagraphics Books

Catalog **free** from:
Fantagraphics
4359 Cornell Road
Agoura, CA 91301

Journey

An epic tale of frontiersman Wolverine MacAllistaire in the wilds of Michigan. William Messner-Loebs' complex and unique personal statement.

The Comics Journal

The only essential journal of news and criticism for the comics industry. Good coverage of both mainstream and alternative comics and creators.

Gary Groth, Editor. **$18**/year from Fantagraphics.

Raw Books

*If comix have an avant garde, **Raw** is it.*

Raw Books

Flyer **free** from:
Raw
27 Greene Street
New York, NY 10013

Raw Magazine

Giant-format comics-as-art magazine, edited by Art Spiegelman and Francoise Mouly. Exquisitely designed.

X

The latest of the Raw "one-shots," this small 32-page hardcover by Sue Coe combines fiery paintings and words to roast the American Dream. Makes Kathe Kollwitz seem like Grandma Moses.

First Comics

Of all the independents, this publisher is closest to Marvel Comics in product: lots of superheroes and several titles outlasting the departure of their original creators.

Nexus

As good a science fiction universe as you are likely to find in comics; superior art and writing by Mike Baron and Steve Rude.

Shatter

When it initially appeared, this title scored piles of publicity as the first comic book drawn on a computer (a Macintosh). With originator Michael Saenz now gone, it isn't the same, but it's still worth a look.

First Comics
Catalog **free** from:
First Comics
435 N. LaSalle
Chicago, IL 60610

American Flagg!

*For its first two years this was the finest comic being published by First — a blistering, dystopian future vision written and drawn by Howard Chaykin. Graphic novel reprints of its best episodes (such as **Hard Times**) are worth obtaining.*

Eclipse Comics

*These folks straddle a lot of territory with their comics. Their superheroes (such as **DNA Agents**) are pretty standard fare, but they've got other items such as a mini-series from P. Craig Russell that stands above the herd. Recently, Eclipse has been in the forefront of the 3-D comic revival, with nicely produced 3-D editions of several of their titles.*

Seduction of the Innocent

This series is named after the sensationalist 1950s book of the same name that led the witch-hunt against comic books for corrupting our nation's children. The vintage comic strips reprinted here are those that originally caused PTAs to quake in their pumps.

Scout

*A grim future a la **Road Warrior**, an American Indian hero, and good strong art and writing from Timothy Truman.*

Alien Encounters • Tales of Terror

Two anthology comics presenting short s.f. and horror strips; various artists and writers, most of them good.

Eclipse Comics
Catalog **free** from:
Eclipse Comics
P. O. Box 199
Guerneville, CA 95446

—Weirdo Magazine

Last Gasp Comics

This is one of the original underground comic publishers. Last Gasp still publishes many comix and distributes even more.

Weirdo Magazine

Robert Crumb founded this quarterly anthology of cartoon strangeness; it remains one of the least predictable publications in America.

Lonely Nights

Frank confessions from the flabbergasting psyche of Dori Seda. Very funny and uninhibited.

Last Gasp Comics
Catalog
$1 from:
Last Gasp
2180 Bryant Street
San Francisco, CA 94110

Anarchy Comics

Antiauthoritarian political cartooning from both the U.S. and Europe.

Kitchen Sink Comix

Kitchen Sink has one foot in the underground camp and one foot in the independent camp. Reprints of classic material by Milton Caniff and Will Eisner rub shoulders with new science fiction comics and a full-fledged underground or two. Some new 3-D comics, also.

Steve Canyon Magazine

Nicely produced reprints of Milton Caniff's famous mix of patriotism and the exotic.

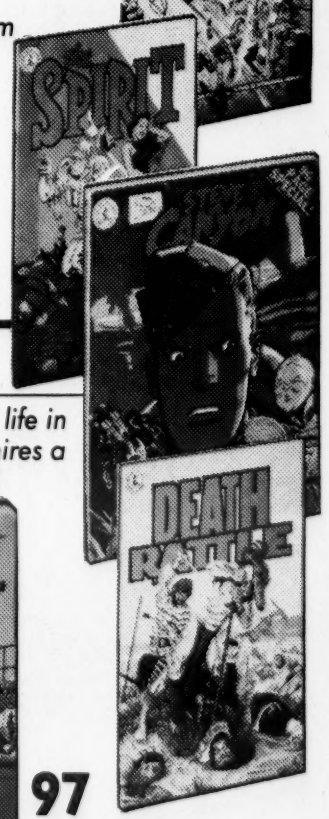
The Spirit

Reprints of Will Eisner's beloved suspense strip from the 1940s.

Death Rattle

Anthology comic of new s.f. and horror comics.

Kitchen Sink Comix
Catalog **free** from: 2 Swamp Road
Kitchen Sink Princeton, WI 54968

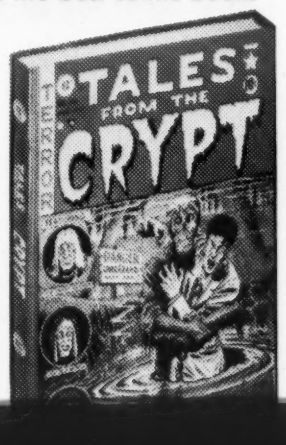


Russ Cochran

This small publisher has been reprinting the complete run of the infamous EC comics from the early 1950s in beautiful hardcover editions. These were the best comic books ever produced. Period.

EC Comics Anthologies

Information **free** from:
Russ Cochran
P. O. Box 469
West Plains, MO 65775

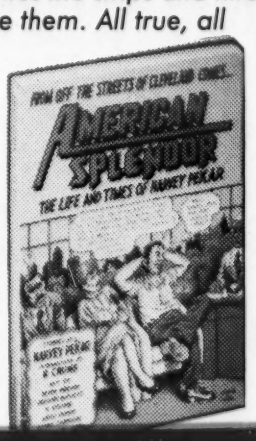


American Splendor

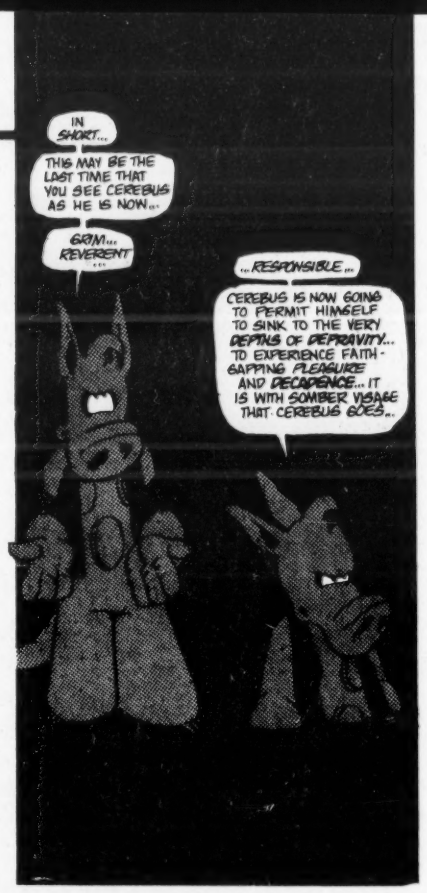
Harvey Pekar has been chronicling his "ordinary" life in Cleveland for years now. He writes the strips and hires a variety of cartoonists to illustrate them. All true, all deadpan, always entertaining.

American Splendor

Information **free** (with SASE) from:
Harvey Pekar
P. O. Box 18471
Cleveland Heights, OH 44118



Cerebus the Aardvark



Dave Sim's ***Cerebus the Aardvark****, a comic-book epic that will take a projected 300 issues to complete, began in the late '70s as a parody of* ***Conan the Barbarian****, and quickly evolved into a richly visualized view of the "aardvarkian age" — a mega-anachronistic amalgamation of medieval church intrigues, Edwardian politics, and superhero parodies. The most charismatic swordsman in the land is Elrod the Albino — a moron in wizard's guise who talks like Foghorn Leghorn ("I say, son, if there's anything the last ruler of a dying race really hates, it's a door without nameplates . . . "). The politics of this mythic land are like an arcane waltz, in which the main partners are Weisshaupt, a George Washington-lookalike tyrant modelled after the legendary founder of the Illuminati, and Lord Julius, who is Groucho Marx come to life as a city-state potentate.*

The many memorable characters of this series, whether male or female, are portrayed with depth and complexity — from the expressions drawn on their faces to the changes they wreak on the plot to Sim's graceful ear for the rhythms of their speech.

Cerebus himself is the only aardvark in Estarcion (most of the other characters are people). He's short, grey, furry, with tail and sword. He represents the self-indulgent, snarling, conniving, manipulating, manipulatable three-year-old lingering in all of us. Like all three-year-olds, he is constantly beset by forces beyond his control, even when, as Pope, he thinks he has the world at his mercy.

Dave Sim's lovingly detailed backgrounds (drawn mostly by a masonry fetishist in his employ named Gerhard) work like the backgrounds in dreams — you feel like you've actually travelled somewhere, but you're not quite sure where that is. And, because Sim is such an obstreperous loudmouth (at least in print), his freewheeling letter-column pages are probably the best place to find true gossip about the comic book industry (if that's of any interest).

As I write this, Cerebus is up to issue #95. The first 25 issues are reprinted in volumes called ***Swords of Cerebus****. Unfortunately, the plot thickens magnificently in issue 26. To get 26 through 90, you'll have to haunt comic book specialty stores, or write to the address above. You can start anywhere in the plot but, once hooked, you'll want to procure or at least read them all.* —*Art Kleiner*

Cerebus the Aardvark
Issues #1-25
available in 6 volumes:
$7.75 each

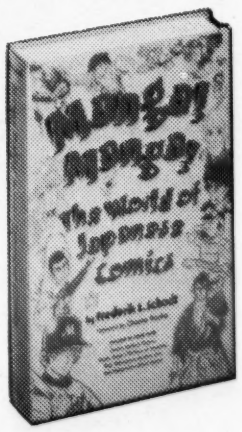
issues #32-96 (except 34, 35, and 50-56)
$2.75 each

postpaid from:
Now and Then Books
103 Queen Street S.
Kitchener, Ontario
Canada N26 1W1

Manga! Manga!

In Japan, where comics don't suffer the same stigma as in the West, they are widely read by all ages, genders, and classes. ***Shonen Jump****, the most popular boys' weekly, has about the same circulation as* ***Newsweek Magazine*** *in a nation half the size. Cinematic and highly visual, these comics offer surprising insights into Japanese culture. This book is the first English-language survey of the genre, providing an historical overview and a sampling of the many different styles and subjects, with several stories reprinted in their entirety.* —*Rebecca Wilson*

***Mighty Atom,* starring a little boy robot with superpowers and human emotions, pioneered the huge genre of robot characters in 1952.**



***Emperor of the Rising Sun,* which began in 1980 in *LaLa*, represents a new trend in girls' comics of dealing with more traditional Japanese themes. The hero is the young Prince Shotoku, an actual historical figure from the 6th century who was instrumental in propagating Chinese culture and Buddhism and in consolidating the Japanese nation. Artist Ryoko Yamagishi's twist is to give the prince supernatural powers and a bisexual personality.**

Manga! Manga!
The World of
Japanese Comics
Frederick L. Schodt
1983; 260 pp.

$9.95
($11.45 postpaid) from:
Harper & Row
2350 Viginia Avenue
Hagerstown, MD 21740
or Whole Earth Access

Turbo Lightning

Turbo Lightning
Version 1.01
not copy-protected
$99.95
requires 128K IBM PC-compatible, w/2 floppy drives and MS-DOS 2.0

from:
Borland International
4585 Scotts Valley Drive
Scotts Valley, CA 95066

The word in my head is rarely the word I need on the page. But I hate thumbing through the dense type of a printed thesaurus. ***Turbo Lightning*** *is less complete than my favorite thesaurus (**Rodale's Synonym Finder**, **WER** #44, p. 72), but it is far more convenient for those of us who write on a computer.*

Type the word "surprise," then look at it on screen and decide it's not quite right. Hit a function key, and ***Turbo Lightning*** *appears to tell you of alternatives: "astonish, astound, amaze, stun, dumfound, stagger . . ." Choose one, and* ***Turbo Lightning*** *quickly replaces the word you typed with the word you want. I often skip through* ***Turbo Lightning's*** *lists of synonyms — "astonish" leads me to "confound," and that to "confuse," and that to "bewilder." If only its thesaurus word file were larger, I wouldn't have to stagger through such lists — but rumors suggest ("propose, recommend, hint, insinuate, intimate, advise") that when compact-disk storage units come out for computers, Borland will be waiting with a massive thesaurus sytem for* ***Turbo Lightning.***

Turbo Lightning *also checks spelling as you type — it beeps every time you key in a word it doesn't recognize. (You can also turn that sometimes-annoying feature off.) It won't check the spelling of all the words in a file, but it will do a full screen's worth. Like many Borland products, it's the pioneer — other computer thesauruses are emerging rapidly to compete, including some built into electronic typewriters. So far it runs only on the IBM PC, which is not usually considered the slickest computer. Still* ***Turbo Lightning*** *is the slickest computer program I've seen in some time.* —Art Kleiner

The IBM XT Clone Buyer's Guide

You should get this small, self-published book before you buy any computer. Updated monthly, it's stuffed with user-group lore and is as current as every computer book should be.

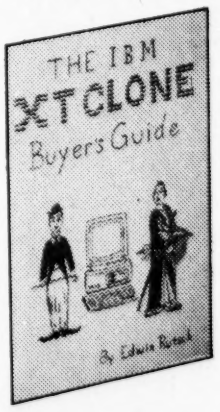
Generic IBM PC clones have radically changed the entire computer market during the last six months. Hardware-savvy entrepreneurs here in the States have been buying component parts made in Hong Kong, Korea, Japan and Taiwan — sometimes the same parts used by companies like IBM and Compaq, sometimes cheaper knock-off versions with the same specifications. They assemble them here to sell, without a brand name, for roughly half what IBM or Compaq charges for the same capability machine.

With the help of this book, I recently bought an assembled PC-compatible, without brand name, with 640K memory (the most you can get right now), two floppy disk drives, a hard disk drive (essential on a PC-compatible, because it ameliorates many of the irritations of this type of computer), plus a keyboard and monitor, for about $1450. An equivalent IBM-PC brand name computer would have cost $2900 or more. Two months later, I saw the same deal for $1250. By Christmas, some savants expect to see such systems selling for $900.

Components have standardized themselves enough that, unlike PC clones of years gone by, these machines run all the software you'd ever expect to use (unless you're a BASIC programmer). And they're just as reliable. If you feel uncomfortable buying generic, the XT-Clone Buyer's Guide also keeps tabs on the brand name machines like Compaq, Zenith, and Radio Shack.

It also describes non-PC clone choices, like the Macintosh, Amiga, and Atari ST, but it's unfairly biased against these easier-to-handle machines. Many people will be too frustrated by a PC-compatible — it requires too much knowledge, and too much futzing, to get it to work effectively. Nonetheless, there is no better deal in computing right now than Asian PC clones, and that situation looks to continue for at least another year.

Note: Like cars, computers shouldn't be purchased mail-order. Something usually goes wrong during the first week or two, and you have to bring them in. After that, they usually run hassle-free. —Art Kleiner



The IBM XT Clone Buyer's Guide
Edwin Rutsch
1986; 70 pp.
$9.95
postpaid from:
Modular
Information Systems
431 Ashbury
San Francisco, CA 94117
or Whole Earth Access

CD ROM: The New Papyrus

Here comes privileged advanced warning of new techniques for storing everything — pictures, text, video, programs — on the same kinds of compact discs (CDs) that have reshaped the audio industry during the last few years. You'll be able to fit a library into a shoebox and to summon any part of it instantly. Whether or not the world wants this new medium is still uncertain, but it threatens to go ahead and reshape publishing and libraries anyway. This high-quality anthology tells how.
—Art Kleiner

•

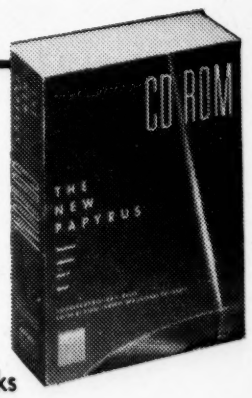
Each CD ROM disc can carry at least 550 megabytes of digital data, with accuracy and reliability as good as those available with the best computer peripherals. This is enough to hold:

- The text content of 150,000 printed pages (enough to fill 250 big books)
- Sharp images of 15,000 pages of business documents (enough to fill two tall filing cabinets)
- The contents of 1200 standard 5.25-inch floppy disks
- A crisp color picture and 10 seconds of narration for each 3000 segments of an educational or reference program (almost 8 hours of content)
- Large amounts of anything else which can be represented digitally; or any combination, in any proportion and order, of any of the above.

Capacity is just the beginning. Any piece of this vast array of information can be located within 1 second of asking for it.

CD ROM:
The New Papyrus
Steve Lambert and
Suzanne Ropiequet,
Editors
1986; 619 pp.

$21.95
($23.95 postpaid) from:
Microsoft Press
10700 Northup Way
Bellevue, WA 98004



BIOREGIONAL

by Lori Woolpert

Illustrated by Edy Brawley

ABOUT TEN YEARS AGO, a devastating fire ripped through 12,000 acres of Pacific Northwest mountain forest. The blaze took over three weeks to control, and left the dreams of over fifty "back-to-the-land" families in ashes. Damage to the ecosystem was severe and many homes were lost, but on the other hand, no one died, some homes were saved, and the fire was ultimately extinguished — all due in large part to radio.

Also unscathed by the fire was the determination of the backwoods homesteaders, a mixture that included many graduate school dropouts and disillusioned professionals who shared little in common beyond the fact that they had cooperatively purchased 20 square miles of majestic hills and deep ravines before dividing it into individual 50-acre parcels. Though they'd consciously chosen the relative solitude of this way of life, the fire taught them a valuable lesson about community. As they rebuilt, radio supplied the bond that transcended the miles of rugged terrain separating the households. And radio provides the security that a major fire will never threaten their world again. Unfortunately, of necessity, their community radio is illegal.

Today 70 households representing over 300 people are linked by outlaw radio in an area where few people have electricity and even fewer have telephones. The radio is essential for the mobilization of the community's all-volunteer fire department, as well as for other facets of community survival, safety, protection, and social interaction.

Legitimate CB wavelengths didn't work. To enable one community member to instantly alert others to an emergency, the radios had to be left on day and night, tuned to a "calling frequency." But hunters and fishermen dominated those airwaves. "So first we modified the radios to operate in a little higher frequency than usual — in the truckers' ranges," explains Cyclone, an electronics engineer who used to build recording studios. He is chief of the volunteer fire department and his house — "Communications Central" — contains a workshop where he has personally modified each of the 120 radios in use by the community. "But then around 1978 we entered a period of intense sunspot activity. Sunspots increase the ionization of the upper atmosphere, making it act like a reflector to radio waves. All of a sudden CB transmissions, which operate on only five watts of power, could be heard across the country."

"I can remember waking up at four o'clock in the morning to the most inconsequential garbage," reminisces Wizard, who dropped out of Stanford two months short of a Ph.D. in physics. Now he does freelance computer programming in the upstairs of his handbuilt house, one of the few on the land to have electricity. "Not only were sunspots adding to the problem, but so were people who were operating on illegally boosted wattage. The ones with the biggest amplifiers also seemed to have the biggest egos. The conversations were inane."

"What we were seeking was community," he observes. "Not just the ability to talk to your best friend, but the ability to tie the whole community together. The ability to leave the radio on day and night and not be irritated by people who were not a part of this bioregion. So, we needed our own band of frequencies, and that's where the outlawry came in."

"Finally we modified the radios so that they

Long-time Whole Earth Review *reader Lori Woolpert is a journalism student at the University of Kansas. It's been our good fortune to have had her spend a summer internship working with us here at Whole Earth, where she's been doing a little bit of everything, including researching and writing this article about a bioregional community united by the airwaves.*

—Ted Schultz

OUTLAW RADIO

broadcast on frequencies far away from CB, in a much longer wavelength that's technically assigned to radio amateurs. This had the added advantage of bending nicely around hillsides," Cyclone points out. "We've been very conscientious about keeping our power output down to the minimum — five watts. We don't want to bother anybody and we don't want to be bothered by anybody."

"Now we've got 80 outlaw channels and 40 regular CB channels on all our radios," explains Wizard. One community member can hail another on the calling channel, specifying a "conversation channel" in the process. Thus, after the initial hailing that everyone hears, the conversation can be continued on a "private line."

"The beauty of the system," Cyclone says, "besides being free, is that unlike telephone, there can be as many people participating in a conversation as civility will allow. If two people key up their mikes at the same time, nothing gets through. It's very democratic in a way. People learn about allowing room for others to talk. This gets reflected in our in-person community meetings — so civility learned on the airwaves transfers down to the reality of face-to-face interactions."

The most important use of the radio is still emergencies, but Wizard has noticed that the radio has expanded into other parts of their lives. "I'd say 90 percent of the radio traffic is nonemergency in nature, and 90 percent of *that* is community oriented, related to child-care, transportation, community meetings, and classes. Lately we've started our own school. I'm teaching a high school physics class, for which all of the arrangements are made by radio."

Recently, when one community member learned of a Forestry Department plan to spray 2,4-D on the tan oak in the area, opposition was organized in a matter of days, again by radio. When the scheduled meeting time with the foresters arrived, 100 people from the community showed up and the plan was cancelled.

Rural crime has also been squelched by radio. In one instance, a community member who noticed strangers with stolen chain saws notified others and a roadblock was quickly erected. The thieves were greeted with shotguns.

Even lives have been saved. A mother returning from town with a three-week-old infant stalled her truck in the middle of a rushing stream. As water rose inside the cab, she radioed for help on the modified truck CB. Then she calmly climbed onto the roof with her child and groceries and waited until the nearest neighbor — Cyclone — arrived to tow her out.

"For anyone with a little technical knowledge, it's not hard at all to do what we've done," Cyclone reveals. "The newer CBs are limited to a specific frequency range by voltage-controlled oscillators now required by the FCC. That makes them very difficult to modify. But older radios and radios manufactured in the Orient don't have this problem. In these, it's very easy to tweak the synthesizer chip — the chip that synthesizes all the frequencies out of one master crystal. Teaberry and Uniden — a Japanese model — are especially good brands to modify, but they're hard to get today. I'd recommend that you buy crystal-controlled radios instead of synthesizer-controlled ones (because of the FCC-required oscillators), and substitute the crystal for the frequency you want to use. Of course, this way you won't get 40 or 80 outlaw channels, just one."

Constructing such a radio network could have numerous applications, as Wizard points out. "There are plenty of people who could benefit from a community radio system like ours. Retirement villages and other places where phones might be too slow in an emergency. And of course other backwoods communities. I don't think any legal option exists for this kind of system. If you own your own trucking company, then you can set up an FM radio station, but if you don't have a business and don't have the funds, then you can't get allocated a frequency. There's no other alternative than to be an outlaw."

Today, with the help of some state and county funds, the community is well prepared against

fire. In addition to the radios in their homes and vehicles, the 22 highly trained volunteer firefighters carry pagers. Three fire trucks are stationed in different locations, one in an all-solar-powered firehouse. "The whole idea is decentralized firefighting," says Wizard. "Cyclone has built circuitry into his home that recognizes the emergency tone calls that come in from county headquarters. It can ring the fire bell even when he's not home."

Both Wizard and Cyclone envision a time when the community will have a radio-based local computer network, with a message board, classified ads, mail, etc. According to Wizard, "We are already developing our own software and hardware to be able to do this very cheaply. It's something we work on in the winter months when it's raining like crazy here. In a few more years, we will perfect the system, and once again, as with the radio, it will take a threshold number of people to make it work. There are about six households out here with computers right now, and soon there will be at least half a dozen more. Then a CB-computer network will be a reality." ■

A*C*E

*The Association of Clandestine radio Enthusiasts (A*C*E) is for people interested in pirate and clandestine broadcasting.*

*"Clandestine" in this context means unlicensed stations trying to undermine the political order in a target area. Most are covertly sponsored by governments, or overtly identified with insurgent groups. Radio Venceremos, "official voice of the Farabundo Marti National Liberation Front," is a well-known example in Central America. A less well-known example, closer to home, is "La Voz de Alpha 66," an anti-Castro station based in or near Miami that broadcasts three nights a week in Spanish to Cuba. A*C*E's monthly newsletter publishes reports about such stations, though the primary focus is on "pirates."*

"Pirates" aren't trying to overthrow a government; they generally just want to offer an alternative to what licensed stations carry. In Western Europe, where broadcasting has traditionally been monopolized by national governments, pirates went on the air to provide local, ethnic, and commercial programming. Their popularity proved the need for such programming and in many cases led to liberalization of broadcasting controls. The pirate scene in North America is quite different. Here it's more in the nature of a prank or a sport, with public service not a typical motive. There are some genuinely bizarre and creative pirates ("The Crooked Man" and "Radio Angeline" are my two favorites), but the majority are lame parodies of legal stations. The FCC cracked down on U.S. pirates last fall, just as the scene was starting to snowball. Since then, only a few stations have made brief appearances (usually on Saturday night around 7425 kHz shortwave).

*But A*C*E continues to be the best way to track this sort of activity. Membership gets you their monthly newsletter, with loggings, reports of busts, interviews with pirates, technical tips, etc. Also included are extensive listings of recent "numbers" broadcasts — mysterious coded messages believed to be instructions beamed to spies. Some people make a hobby of trying to figure out the codes or locating the transmitters. Most of this work goes on behind the scenes, but the listings in A*C*E will at least help you find the broadcasts. (If you have a computer, you can access the A*C*E BBS at (913) 677-1288.)*

—Robert Horvitz

The A*C*E
Keith J. Thibodeaux,
Editor
$12/year
(12 issues) from:
Keith J. Thibodeaux
P. O. Box 46199
Baton Rouge, LA 70895

•

The Crooked Man: 3433, 3/24, 0005-0015*, SIO=454. Rock mx, w/"telephonic" voice over mx "When I was in S. Carolina he gave me a haircut," "he's afraid of me," "he's on speed," claimed to have invented the ultra violet light, much talk revolved around blue and purple. Sounded like he was either tripping or psychotic. Must be a good actor. Nobody could be that wasted and put such a decent signal, exactly on freq a year after last being reported here and sound *just* as strange! (Provance, OH)

•

Voice of Bob: 7435, 2/15, *2042-2053*, SIO=211-222. Featured "Mr. Science Lecture Series" The Neutron. Some mx and several different air personalities. Hilo address. (Mendyk, IL)

•

This month we begin with some QSL address information. Recent QSL reports from several sources indicate that a few addresses have produced verifications from some commonly heard Latin American clandestines. Among these is La Voz de Alpha 66 at P. O. Box 420067, Miami, Florida 33142. In addition, both Radio Miscut and Radio Monimbo have reportedly been verifying and/or quasi-verifying through the UDC-FDN United States office, which is located at 1000 Thomas Jefferson Street, Suite 607, Washington, DC 20007. It is highly recommended that detailed, polite reports, as well as prepared QSL cards, be utilized when corresponding with these addresses. Otherwise, your odds of a reply will go down significantly, and the QSL sources themselves may dry up for other DX-ers in the future.

•

The heart of a transmitter is its oscillator . . . that part of it which determines the fundamental carrier frequency which can later be amplified and modulated by the rest of the rig. Figure 2 displays the schematic diagram for our transmitter's oscillator. Q1 . . . a MPF102 field effect transistor (FET) . . . is a variable frequency oscillator, the frequency of which is determined by the values of L1 (a small, slug tuned inductor) and C7 (variable capacitor). This circuit will cover the upper portion of the AM band and should also tune above 1600 kHz, which may be useful if the Part 15 regulations are expanded when the FCC permits the commercial broadcasters to extend up to 1700 kHz in a few years.

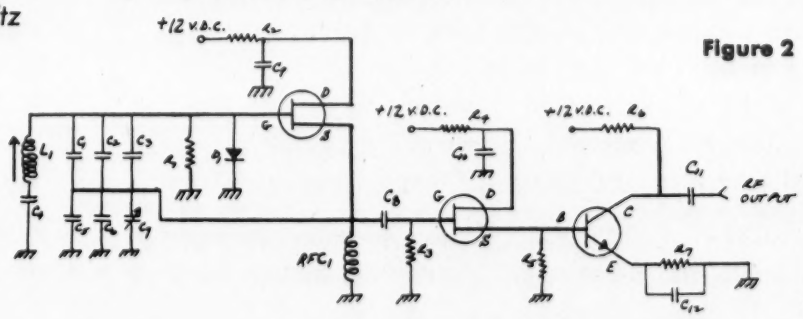


Figure 2

The Passion of Ayn Rand

What a riveting, valuable book. Ayn Rand, the author of ***The Fountainhead*** *and* ***Atlas Shrugged****, was half angel, half monster, with both sides saying you had to take all of her. She was the apostle of zeal and competence and capitalism, writing with cartoon romanticism in a way that changed readers' behavior, mine included. She was also the apostle, and ultimately the prisoner, of a hermetically sealed philosophic consistency that was no gift to her followers.*

Her biographer is ideal for the job, a fierce, bright blonde straight out of her fiction, named at one point as her intellectual heir. Barbara Branden saw the best of it and the worst of it and reports both. From Alice Rosenbaum, the headstrong, impoverished teenager in Petrograd, to the priestess of Objectivism, Ayn Rand's life was literally a work of dramatic fiction. Her name was chosen — "Rand" from the Remington Rand typewriter, "Ayn" from sort-of Finnish, rhymes with "mine." Her husband Frank was approximately a fantasy, her followers were characterized in terms of figures in her novels, and the showdown of her life was a pure product of her projected mind.

In 1968, a nuclear explosion of subjectivism blew the core group of Objectivism to bits. When Nathaniel Branden, Rand's biographer's husband, regretted to inform the 63-year-old philosopher/novelist he could no longer continue their 14-year sexual affair, cuckolded spouses Frank O'Connor and Barbara Branden watched in horror as Ayn Rand went coldly nuts. It was high tragedy to the participants, high farce to anyone watching from outside, as the protagonists struggled eloquently for the moral high ground, declaiming speeches from Ayn Rand's fiction at each other.

It's a healthy, healthful book finally, adding the balance of the rest of the story to the influential Randian opus. Ayn Rand's detractors will come away from the book admiring her; her followers will come away chastened.

—Stewart Brand

•

While most eighteen-year-olds were groping helplessly in the world of ideas, seeking the intellectual moorings it might take them years to find, the small, ferociously intense young Alice Rosenbaum was engaged in a determined effort to name, to prove, to systematize and integrate the separate philosophical ideas she had been grappling with since the beginning of adolescence. When formed, those ideas were never to alter in any of their essentials; they would be honed and clarified and expanded; but what she believed at eighteen, she believed undeviatingly, without a backward glance or hesitation or doubt, for the rest of her life. In later years, she would say: "I have held the same philosophy I now hold, for as far back as I can remember. I have learned a great deal through the years and expanded my knowledge of details, of specific issues, of definitions, of applications — and I intend to continue expanding it — but I have never had to change any of my fundamentals. My philosophy, in essence, is the concept of man as a heroic being, with his own happiness as the moral purpose of his life, with productive achievement as his noblest activity, and reason as his only absolute."

The Passion of Ayn Rand
Barbara Branden
1986; 442 pp.
$19.95
postpaid from:

Doubleday & Co.
Direct Mail Order
501 Franklin Avenue
Garden City, NY 11530
or Whole Earth Access

Ayn and Frank as matron of honor and best man at the wedding of Barbara and Nathaniel Branden in 1953.

The Golden Road

This is the only magazine for Deadheads, and the only magazine that devotes 100 percent of its contents to the good ol' Grateful Dead. Deadheads can never get enough of the band, and this fills in the gaps as well as it could be done. Costs less than any of their shows yet carries the spirit of the performance into print better than I thought possible. These are folks who are "keepin their day job till their night jobs pays," and I hope it pays. Free tape swap ads for new subscribers. —Rich Cower

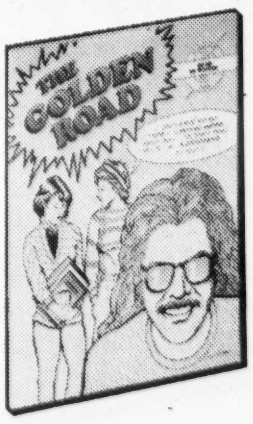
There is a cheery family spirit in this Grateful Dead fanzine that even a non-Deadhead like me can enjoy. More interesting than I would have imagined. —Kevin Kelly

•

Given the phenomenal success of the Grateful Dead and their continuing ability to draw young fans to their shows, it's always mystified me that there aren't more bands playing improvisational rock and roll. When I asked Garcia about this a couple of years ago, he commented, "One of the reasons is that all the pop music trends have been for songs and, you know, catchy shit. You can't say that improvisational rock and roll is a leading trend. It isn't exactly in the forefront of what's going on in music." At the same time, he noted, "If there are young players who enjoy playing that kind of music, and their playing is interesting enough that their audience enjoys it as well, then they will be encouraged to do that the way we've been encouraged to do it. We do it because it's our basic drive, an inescapable part of what we do musically. We even did it when we were playing in bars, five sets a night — and they *hated* us for it!"

•

"As long as the Dead keep playing, part of me never has to grow up. As far as I can tell, the band remains the most mystical rock unit on earth, and strange and wonderful adventures are still possible at a Dead concert. A Dead concert is more than these guys playing music, it's a conversation, a near primitive celebration, a carnival of the spirit . . . If the Dead are over the hill, I want to go with them. It's all got something to do with Peter Pan, and if you don't get it, well, you just don't get it."



The Golden Road
Blair Jackson and
Regan McMahan, Editors
$10/year
(4 issues) from:
The Golden Road
485 Lake Park Avenue
#82-W
Oakland, CA 94610

Postbellum Fiction

Each of these novels deals with postapocalyptic Reconstruction. ***Fiskadoro*** *takes place about 70 years after the last warhead has fallen, on the Gulf Coast of Florida, whose inhabitants are making pretty good progress at becoming hunter-gatherers.* ***Riddley Walker*** *and* ***Arrows of Desire*** *are set a couple of thousand years later, in the remnants of England; the former takes place at a time when the hunter-gatherer society is dying and a new culture waits to be born; the latter deals with a confrontation between a well-meaning worldwide bureacracy and human nature.*

All three are well written and believable. ***R.W.*** *is the best by far, though: its author, Russell Hoban, succeeded in the creation of a devolved English language that, but for his amazing deftness, would have been embarrassingly lame. You'll want to have a current map of the southeast quarter of England handy.* —*James Donnelly*

•

In Leon's yard a man from Twicetown did a silly dance, lifting his heels high in the air behind him, almost kicking himself in the rear. Fiskadoro didn't know him and wished the man would get hurt or do something to make himself look completely stupid. Maybe he was off a boat, but he seemed unconnected. This man wouldn't tell anybody his name. Instead he started that stuff they were all doing over in Twicetown these days, putting his face out and saying, "Jake Barnes, private eye!" Fiskadoro wanted to tell this Jake Barnes to leave his father's Captain's house, but the person was red-faced and danced in an almost violent way.

•

Beggars moved along the road ahead of him toward the lowering dusk, people without arms, gangs of pinheads led by their insensate cousins, twisted-up people, the sightless and deaf, and creatures obliged to cover up their faces with rotting burlap, or muslin gone grey, so that nobody would have to see what terrifying pictures the genes could paint. Only the legless immobile ones were put up with in town . . . . —*Fiskadoro*

Fiskadoro
Denis Johnson
1985; 221 pp.
$6.95
($7.95 postpaid) from:
Alfred A. Knopf
Attn.: Order Dept.
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access

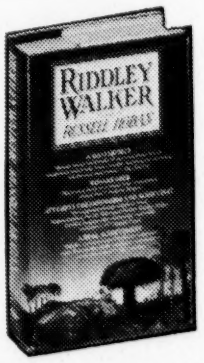
•

No 1 uses the old place names now they ben unspoak this long time but mos of them are stil there in the places. You know Cambry ben Canterbury in moufs long gone. Canterbury. It has a zanting in it like a tall man dantsing and time back there ben foun there girt big music pipes as big as fents poals people said. You try to think of how it musve soundit when the Power Ring ben there and working not jus crummelt stannings and a ditch. It musve ben some girt jynt thing hy hy up and with a shyning and a flashing to it time back way back when they had boats in the air and all the res of it. Did it woosh and hum or ben it dumming and beating like the hart of the worl and what ben the music come out of them pipes? You dont know nor you wont never know. You can feal how there ben Power there. You go down 1 side of the Ring Ditch and up the other side you can feal it in your knees how youre walking tremmery and you can feal it in your belly. Feal it hy hy over you and overing you. Old foller in the air the after blip and fading of what ben. Fading fading dwindling on the air but the fading and the dwindl sending out ther sylents roun and roun that circel never slowing to a stilness. Wel realy there aint no stilness any where is there. Not 1ce you begin to take noatis.

•

'You know Riddley theres some thing in us it dont have no name.'
I said, 'What thing is that?'
She said, 'Its some kynd of thing it aint us but yet its in us. Its looking out thru our eye hoals. May be you dont take no noatis of it only some times. Say you get woak up suddn in the middl of the nite. 1 minim youre a sleap and the nex youre on your feet with a spear in your han. Wel it wernt you put that spear in your han it wer that other thing whats looking out thru your eye hoals. It aint you nor it dont even know your name. Its in us lorn and loan and sheltering however it can. . . .
'Its all 1 girt big thing and divvyt up amongst the many. Its all 1 girt big thing bigger nor the worl and lorn and loan and oansome. Tremmering it is and feart. It puts us on like we put on our cloes. Some times we dont fit. Some times it cant fynd the arm hoals and it tears us a part. I dont think I took all that much noatis of it when I ben yung. Now Im old I noatis it mor. It dont realy like to put me on no mor. Every morning I can feal how its tiret of me and readying to throw me a way. Iwl tel you some thing Riddley and keap this in memberment. What ever it is we dont come naturel to it.'
—*Riddley Walker*

Riddley Walker
Russell Hoban
1980; 220 pp.
$6.95
($7.70 postpaid) from:
Simon & Schuster
Attn.: Mail Order Dept.
200 Old Tappan Road
Old Tappan, NJ 07675



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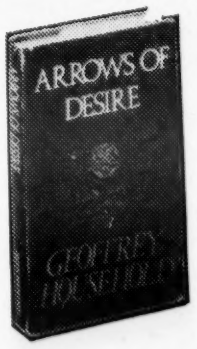
It was impossible to contrast life as it was before the Age of Destruction with the Federal life of today, and ask the question: what of any value had been preserved? A pointless question. The abolition of the nation state and its venomous patriotism had saved humanity from death after death and the real threat of extinction as suffered by so many of man's fellow animals.

•

The Federation had every reason to be proud of its resettlement of the British, of its grouped houses surrounded by open space, its terraces which mapped the groves and pools, its low factories stretching westwards, their white walls complementing the spaced public buildings in the centre of the city. Could one even call it a city . . . ? It was a country in miniature, a newborn babe ready to be lifted from the bloodied sheets of the past.
—*Arrows of Desire*



Arrows of Desire
Geoffrey Household
1985; 136 pp.
$12.95
($13.95 postpaid) from:
Little, Brown and Co.
200 West Street
Waltham, MA 02254
or Whole Earth Access

Incredibly Strange Films

This fully indexed and affectionately thorough entry in the book-length ***ReSearch*** *series is a true labor of love. It's a chronicle of various types of "incredibly strange" films — and filmmaking — which have either been ignorantly overlooked or deliberately ignored by mainstream film critics.* ***The Acid Eaters, Cafe Flesh, Cat Women of the Moon, Spider Baby, Reform School Girls, Night of the Bloody Apes*** *. . . doesn't it seem that there's something not quite, well . . . respectable about these titles? Of course! And, as none other than Picasso once said, "The chief enemy of creativity is 'good' taste."*

Historically, the avant-garde and the unsavory (to middle-of-the-road sensibilities) have always been linked, and these movies are not likely to be rehabilitated for consumer consciousness at any time in the immediate future. However, the approach taken by guest editor Jim Morton and the other writers of this book has nothing to do with "camp" or the hyped "cult" status of such films as the supposedly daring (but actually safe and unthreatening) ***Rocky Horror Picture Show****. In a process of analysis and discovery, the* ***ReSearch*** *critics introduce productions transcendentally bad or stunningly strange. They write not only about eccentric films but also about eccentric genres, such as women-in-prison, industrial safety, "nudie," psychedelia and juvenile delinquency. There are director interviews, checklists, synopses, a bibliography and essays on personal favorites. Pictures include rare stills, pressbook excerpts and posters. There's even a section devoted to quotes of god-awful dialogue from these films — which after a while can start sounding strangely poetic and meaningful.*

If movies are a kind of self-portrait of our culture, defining our mutual idea of reality, these movies break down and expand that definition. By doing so, they also, in their own peculiar way, expand our awareness.

—Harry S. Robins

ReSearch: Incredibly Strange Films
Jim Morton, Editor
$15
postpaid from:
ReSearch
20 Romolo #B
San Francisco, CA 94133

•

So what makes films like Herschell Gordon Lewis's *The Wizard of Gore* or Ray Dennis Steckler's *The Incredibly Strange Creatures Who Stopped Living and Became Mixed-up Zombies* worthwhile? First of all: unfettered creativity. Often the films are eccentric — even extreme — presentations by individuals freely expressing their imaginations, who throughout the filmmaking process improvise creative solutions to problems posed whether by circumstance or budget — mostly the latter. Secondly, they often present unpopular — even radical — views addressing social, political, racial or sexual inequities, hypocrisy in religion or government; or, in other ways they assault taboos related to the presentation of sexuality, violence, and other mores.

•

Boyd Rice: By the way, do you happen to know Cresse and Frost?

Ted V. Mikels: I knew Bob Cresse reasonably well twenty years ago; I don't know what he's doing now.

BR: I heard he was shot in the stomach and had to leave the country.

TVM: I heard that, too. He was involved in a different type of film than I was!

•

Let a man or woman venture from the well-beaten path of civilization, let him cross the threshold of the limited intellect, and he encounters amazing and wondrous things: the unknown and terrible. If he escapes with his life, he will usually find he left his reason behind him.

—Mesa of Lost Women

Talking Pictures

"There was the era of the actor, when a film was its star, and we had Mary Pickford, Douglas Fairbanks, Greta Garbo. Then we had the era of the director, and the films of King Vidor, Sternberg, Feyder and Clair. A new era is beginning: that of the author. After all, it's the author who makes a film." So said Jean Renoir in 1939. Why his prediction hasn't come true is the subtext of this critical look at some of the most neglected contributors to the filmmaking team. Whether screenwriter Frank S. Nugent will one day share shelf space with John Ford is not the main issue here. This is a much-needed shake-up of the assumption that any film, especially a Hollywood film, can ever be credited to one name. By looking at the unheralded role of the screenwriter, this study necessarily throws light on all the collaborative backing-and-filling that is the weird essence of making movies. —Steven Levy

•

We don't have many of these memoirs, though — screenwriters being a notoriously underinterviewed breed (ever read one with Herman Mankiewicz?) — and since most Hollywood egos are approximately the size of the Graf Zeppelin, the accounts of screenwriters may be taken with the same pillar of salt we keep handy for directors' interviews and actors' autobiographies. Nevertheless, a screenwriter's work should and can be judged by analyzing his entire career, as is done with a director. If a writer has been associated with a number of favorite films, if he has received sole writing credit on some of these films, and if we can decipher a common style in films with different directors and actors, an authorial personality begins to appear.

Talking Pictures
Richard Corliss
1974; 398 pp.
$10.95
($13.40 postpaid) from:
Overlook Press
RR1, Box 496
Woodstock, NY 12498
or Whole Earth Access

VISIONS OF HOME

Preserving America's Folk Art Environments

▲ THE SHAFFER HOTEL AND RANCHO BONITO

In 1924, Clem "Pop" Shaffer opened the Shaffer Hotel in Mountainair, New Mexico, and using bright colors and geometric shapes, painted American Indian-like patterns all over the interior and exterior of the hotel. The dining room is the most spectacular of the rooms, and includes a huge painted ceiling and dining room chairs each painted with dark blue, bright orange, black, red and green patterns. In the late 1930s, when Pop was 57, he acquired 240 acres just outside Mountainair, not far from the Shaffer Hotel, and named it Rancho Bonito. Rancho Bonito became Pop's workshop and playground. He spent nearly every day there painting and carving. He built a log cabin and painted it red, white, and blue. He had intended to carve a herd of 1,000 "critters" in the yard of Rancho Bonito, but only completed 300. Some of the 300 were later sold, some eaten by termites. Both the hotel and Rancho Bonito have been local attractions since the late 1920s and are now listed on the National Register of Historic Places.

by Jocelyn Gibbs **Photos by Seymour Rosen**

THE CITY OF LOS ANGELES FIRED the first volley in the war against the nation's folk art environments in 1957, when it issued an order to demolish the Watts Towers that Italian immigrant Simon Rodia had built in his back yard out of cement, steel rods, and pieces of pottery, glass and shell, and without the use of rivets or bolts. At the end of Rodia's 33 years of construction in 1954, city officials worried about the structural integrity and safety hazard posed by the Towers, rising nearly 100 feet into the suburban southern California sky. Fortunately, a group of Los Angeles citizens, who considered the Towers to be an extraordinary work of art, formed the Committee for Simon Rodia's Towers in Watts and fought the demolition order. Negotiations between city officials and the Committee resulted in a load test that would determine the fate of the Towers. For a full minute and a half, ten thousand pounds of pressure was exerted against the tallest of the Towers and failed to topple it,

---

Folk art environments are magic places built by people who are able to ignite a flame with that creative spark that exists in each of us. With the aid of his trusty camera, Seymour Rosen has spent more than 20 years documenting and sharing these magic places; he founded the organization SPACES to preserve them. Because of my long friendship with Seymour I've been lucky enough to view some of these folk art environments in the form originally intended by their creators — as part of their homes. Jocelyn Gibbs, a former director of the Beyond Baroque Foundation, is currently working toward a degree in the History of Architecture and is a staff member and consultant at SPACES. —Susan Erkel Ryan

though it did threaten to break the testing equipment. The test was halted, the demolition order rescinded, and the defenders of America's folk art environments had won their first battle. Today, the Watts Towers are recognized and admired worldwide, but other, less well-known folk art environments are in grave danger of destruction. Large artistic constructions such as Rodia's towers are often categorized by city agencies, real estate developers, and other bureaucratic entities as structures that ought to meet the stringent and standardized building codes and economics that apply to conventional buildings. Out of the need to defend these exceptions to the rules, an organization called Saving and Preserving Arts and Cultural Environments (SPACES) was formed in 1978.

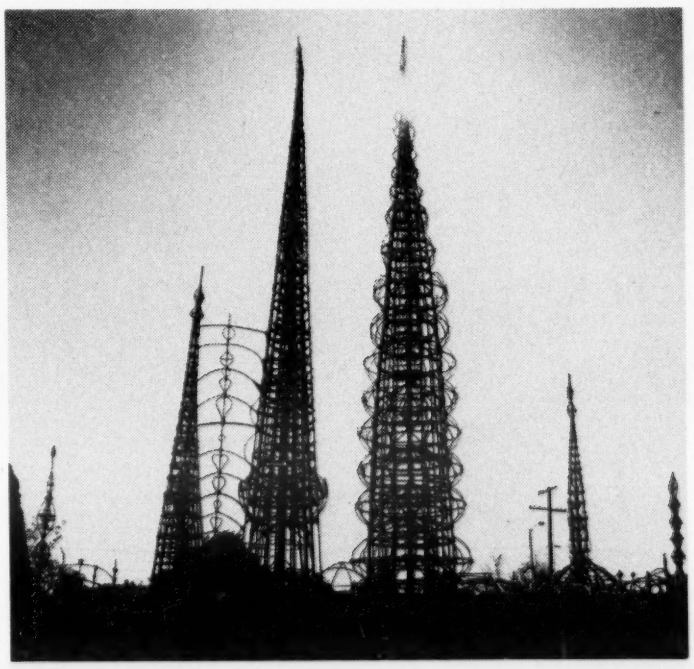
SPACES initially focused on identifying, documenting, and preserving folk art environments in California, but when it became clear that similar works in other states were equally vulnerable, SPACES became a national organization. With the assistance of the National Endowment for the Arts, SPACES conducted in 1979 a survey that identified 200 folk art environments in the United States. Since then the list has grown.

SPACES defines folk art environments as

PRAIRIE MOON PARK ▲

Herman Rusch created a 2-acre garden in Wisconsin and called it Prairie Moon Park. It contains 45 objects ranging from birdhouses and planters to 20-foot-high "sun spires." The spires are crowned with mirror-covered stars to capture the sunlight. A 168-foot-long concrete fence delicately loops across the landscape. A large concrete cactus is planted in a cartoon garden plot. Herman Rusch was born in 1885, and the last we heard of him was in 1979 when the site was sold. Rusch's creations were kept intact, but the new owners do not encourage visitors.

WATTS TOWERS ▼



27 GATE FIVE ROAD SAUSALITO CA 94965

▲ GABRIEL'S WOODEN GARDEN
After realizing that the climate in Eureka, California, was too rainy for a year-round flower garden, Romano Gabriel built himself a garden using wood from fruit boxes. The garden of brightly painted wooden plants and figures had lights and moving parts and eventually grew to hide his house. After his death, a preservation committee managed to move part of the garden to a permanent exhibition space in Old Town Eureka, where it can be seen today.

"hand-made personal places." Many sites are created with the detritus of the larger society, and most serve as home to their creators. When the artist dies, or just moves to another city as Simon Rodia did in 1954, the site can become especially vulnerable to decay, vandalism, or redevelopment. SPACES maintains documentary records of these environments through photographs, site plans, and oral histories. When a site becomes vulnerable, SPACES works to mobilize the local community through local preservation groups and city agencies.

Fortunately, there are people around the country who recognize and appreciate these sites as remarkable art and as very personal visions of home. In Simi Valley, California, the Bottle Village Committee has taken responsibility for the preservation of Tressa "Grandma" Prisbrey's Bottle Village; the Art Beal Foundation assists Art Beal and his Nit Wit Ridge in Morro Bay, California. Many individuals have made large and small contributions to these places of "divine disorder," from Emanuel "Litto" Damonte's neighbors in Napa County, California, who brought objects for him to incorporate into his Hubcap Ranch, to individuals who have purchased environments to ensure their safety and integrity. Although there are success stories, many sites have been lost, including some of those described here. Many hundreds of folk art environments dot the nation's landscape. As our cities grow in size and sameness, it remains to be seen how many of these places that celebrate individuality will continue to be tolerated, let alone loved.

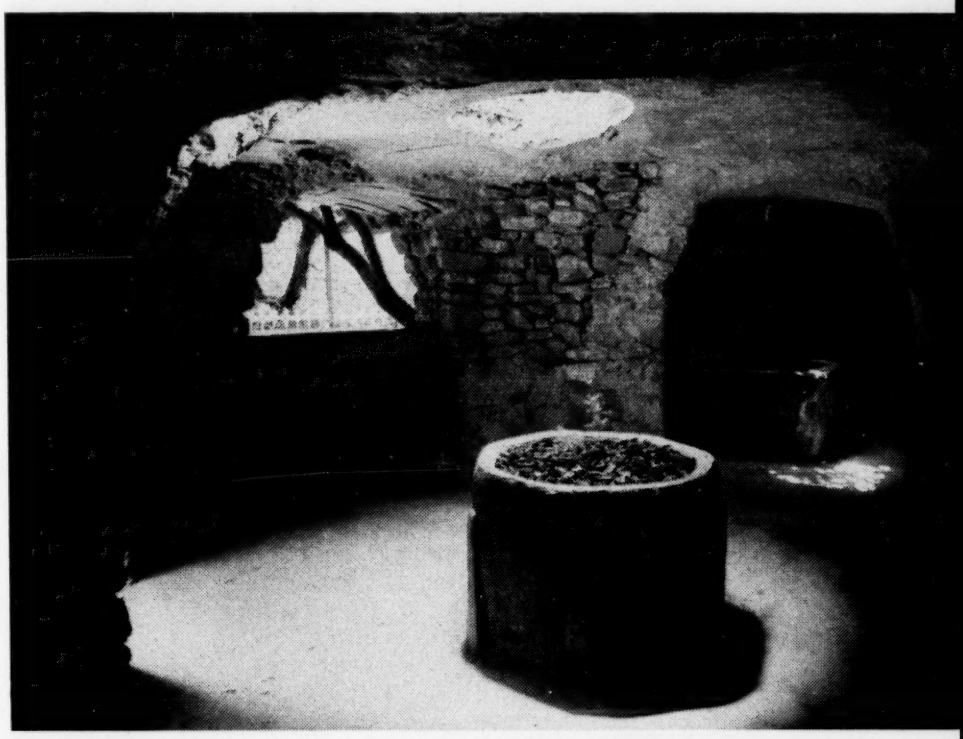
◀ ROLLING THUNDER MONUMENT
Rolling Mountain Thunder is a Creek Indian, born November 11, 1911, as Frank Van Zant. An articulate and poetic man, he worked at many jobs and became a highly decorated veteran of WWII before receiving a vision from the Great Spirit that prompted him to move to 40 acres on the side of Thunder Mountain in Nevada. There he built an intricate sculptural environment shaped like an Indian carry basket "so that the Great Spirit can pick the whole thing up and just carry us all away." The Monument, as he calls it, grew from the Nevada desert; it is made from local rocks and from other people's cast-off materials. It incorporates so many different materials that it is difficult to comprehend or describe. A beautiful spiny staircase made of bicycle handlebars covered with cement winds through the core of the Monument. The many sculptures depict historical and spiritual characters from Rolling Mountain Thunder's life and from Native American history. This place that is home to Rolling Mountain Thunder, his young wife, and children (and has been home to other people temporarily) has many times been the target of vandals and arsonists. In 1983, Rolling Mountain Thunder was the first folk artist to be awarded Nevada's Governor's Arts Award.

GEHRKE WINDMILLS ▶

Emil and Veva Gehrke lived into their nineties in an isolated home above the Grand Coulee Dam, where together they constructed a colorful windmill palace consisting of 300 handmade windmills. After working as a millwright most of his life, Emil Gehrke made his first windmill at the age of 65. The 300 windmills he built and Veva painted incorporated discarded household items: shovels, hats, pans, toys, toilet seats, toasters, and even a leather workboot that had belonged to a one-legged man. The Gehrkes, believers in hard work, conservation, and reflexology, were suspicious of machines and so made their own benign versions. Since their deaths, 27 of their windmills have been acquired by Seattle's one-per-cent-for-the-arts program and moved to a utility company substation, where the windmills twirl in ironic dialog with the utility company's more "sophisticated" form of power.

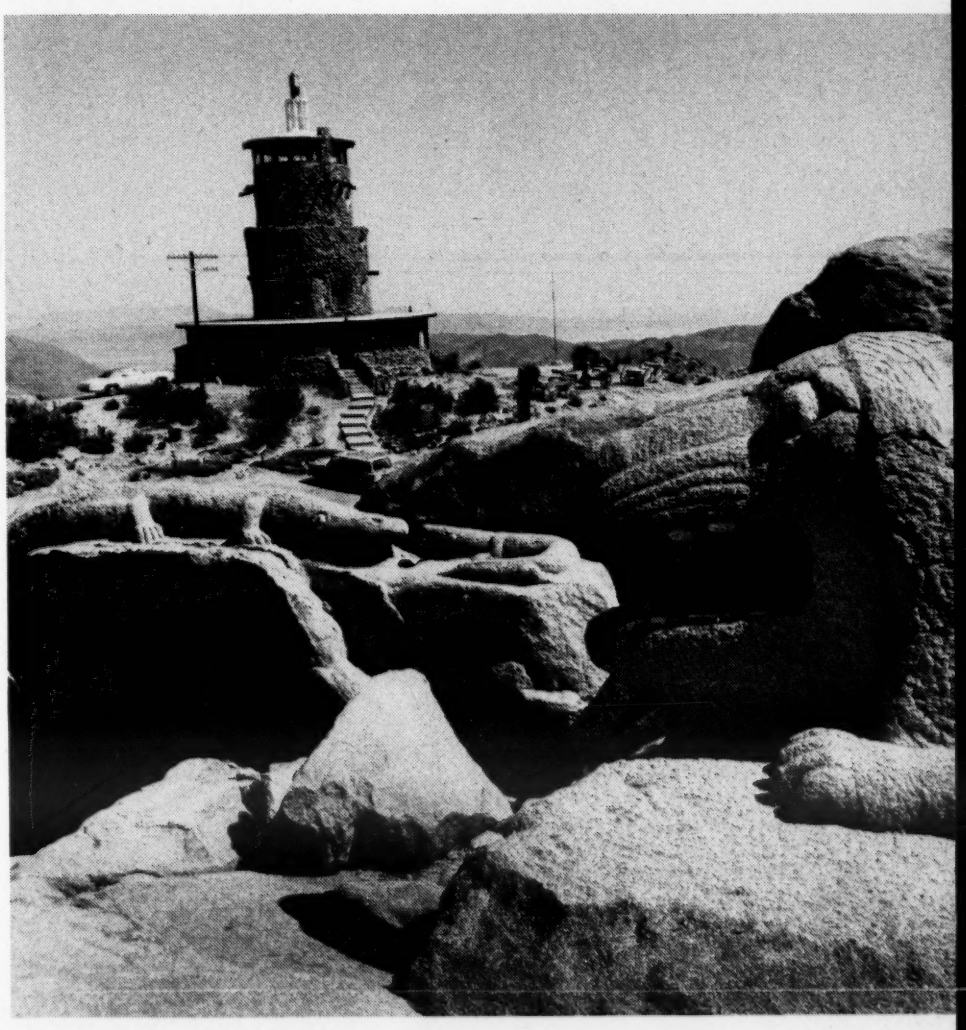
THE UNDERGROUND GARDEN ▶

Underneath a parking lot in Fresno, California, lies a labyrinth called the Underground Gardens. Baldasare Forestiere was an Italian immigrant who had worked briefly as a tunneler for the New York subway. Remembering the coolness of the underground tunnels in New York, Forestiere decided to build an underground home when he settled in Fresno, located in the hot San Joaquin Valley. For three decades, until his death in 1946, Forestiere dug out 40 underground rooms in seven acres by using a pick, shovel, and wheelbarrow, as well as a horse and small scraper to move large rocks. This underground home includes patios, grottos, courts, winding passageways and living quarters, and derives its name from the many fruit trees and vines planted under open air skylights. Most of the gardens are 10 feet below the surface, but in sections there are three layers of rooms, descending to 22 and 25 feet and supported by arches, columns, and domes. According to Forestiere, "Anyone can dig a straight line . . . But to make them crooked and make them beautiful, that's where the work lies." The Underground Gardens is maintained by the Forestiere family and is a National Historical Landmark and a California Historical Landmark.



DESERT VIEW TOWER ▶

In 1922-23, Burt Vaughn erected a stone tower in Jacumba, California, as a memorial to the pioneer road and railroad builders who opened this part of the treacherous desert to travelers on their way to San Diego. The Desert View Tower is an observatory built with four-foot-thick stone walls that provide views out over the Salton Sea and California mountain ranges. In the 1930s, a retired engineer named W.T. Ratcliffe came to Jacumba to take a rest for his tuberculosis, and spent his time carving animal figures from the boulders that surround the tower. The snakes, lizards, fish, and buffalo that lurk in the crevices and sun on top of the many boulders range in size from three to ten feet long. Desert View Tower and its resident stone creatures were named to the National Register of Historic Places in 1980 and were made a California State Historical Landmark in 1981.



27 GATE FIVE ROAD SAUSALITO CA 94965

▲ GARDEN OF EDEN

Samuel P. Dinsmoor was a 65-year-old veteran of the Civil War when he moved to Lucas, Kansas, in 1907 and built his house of native limestone, cut and fitted like logs. In his yard, he built a Garden of Eden containing 15 trees, walks, fences, 150 sculptures of animals, the Devil, Adam, Eve, Cain, Abel, the Serpent, flags, and a visitors' dining hall, all made of cement. In 1916, he built a 40-foot-high mausoleum of native limestone. His first wife was eventually buried there. Dinsmoor remarried at the age of 81, fathered two children, and in 1932 joined his first wife in the mausoleum. The property was purchased by a neighbor in 1968 and opened to the public. The Garden of Eden was added to the National Register of Historic Places in 1977.

POSSUM TROT ▶

Calvin and Ruby Black bought land in the Mohave Desert sight unseen and named it Possum Trot. They opened a rock shop and then built other enticements so passers-by would stop and spend some money. A roadside show of small wind-generated carousels advertised the "Fantasy Doll Shows," which were populated by over 80 nearly life-size dolls made by Calvin and Ruby. Calvin carved each one; together they decided upon a name and personality; and Ruby made the clothes. Calvin wrote music, songs, and dialog for his wooden but by no means inexpressive troupe and also provided the musical accompaniment. The dolls' voices were broadcast to the audience through speakers in the dolls' heads connected to small battery-powered tape recorders. Each doll had a tip can and visitors were encouraged to give their favorite performer a contribution which would buy her (most were female dolls) perfume or a piece of jewelry. After Calvin died in 1972, Ruby had difficulty keeping Possum Trot from deteriorating, even though the site had been named a California Historical Landmark. When Ruby died in 1980, the site was dismantled and the dolls acquired by a private gallery. Now Possum Trot and the Fantasy Doll Theatre live on only in the memories of a few lucky people, in photographs, and in the film "Possum Trot" made by Light/Saraf Films.

THE HOUSE OF
A THOUSAND PAINTINGS

Sixty-eight-year-old Sanford Darling was trying to decide what color to paint his house when he had an inspiration, and images from his recent world tours appeared on the walls. "Anything that was flat, I painted a picture on," Darling explained. Over the next ten years, until his death in 1974, Darling painted images of the South Seas, Hong Kong, Germany, Japan, Yellowstone National Park, Beirut, and many more places on his sidewalk, roof, walls, floors, furniture, stove, even garbage cans, and created the Santa Barbara landmark known as the House of a Thousand Paintings. The house was sold after his death and has since been stripped of its paintings. ▶

◀ GALLOWAY WORKSHOP AND PARK

Nathan Edward Galloway retired to Foyil, Oklahoma, in 1937 and there constructed his Galloway Workshop and Park. He made an octagonal workshop for woodworking, one tall totem pole, four smaller totem poles, a concrete tree, tables, chairs, and gates decorated with owls and totems. These structures were made of wood, metal, and wire mesh armatures covered with tinted concrete and carved with bas-relief figures, flora, and fauna. He carved hundreds of freestanding wooden objects (including many violins) in addition to carving the concrete figures in his park. He began carving as a boy, making wooden buttons for his mother's dresses. For most of his life he taught woodworking at a boys' school. Galloway died in 1962. Although his site was vandalized in 1967, Galloway's Park remains largely intact and the new owners have plans for restoration.

POSSUM TROT

WE DONT KNOW WHERE MA is BUT WE GOT POP ON ICE

OPEN

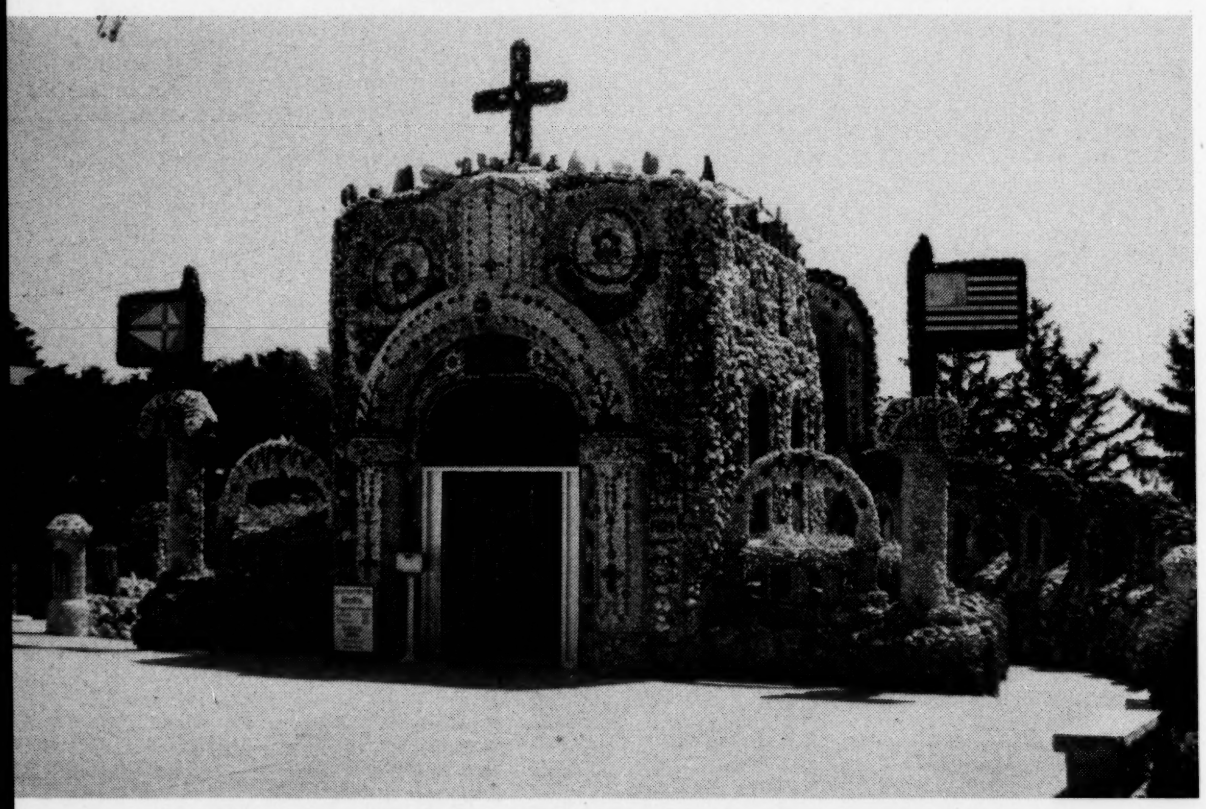
Cola

IROQUOIS INDIAN MADE JEWELRY DOLLS

S.DARLING 417

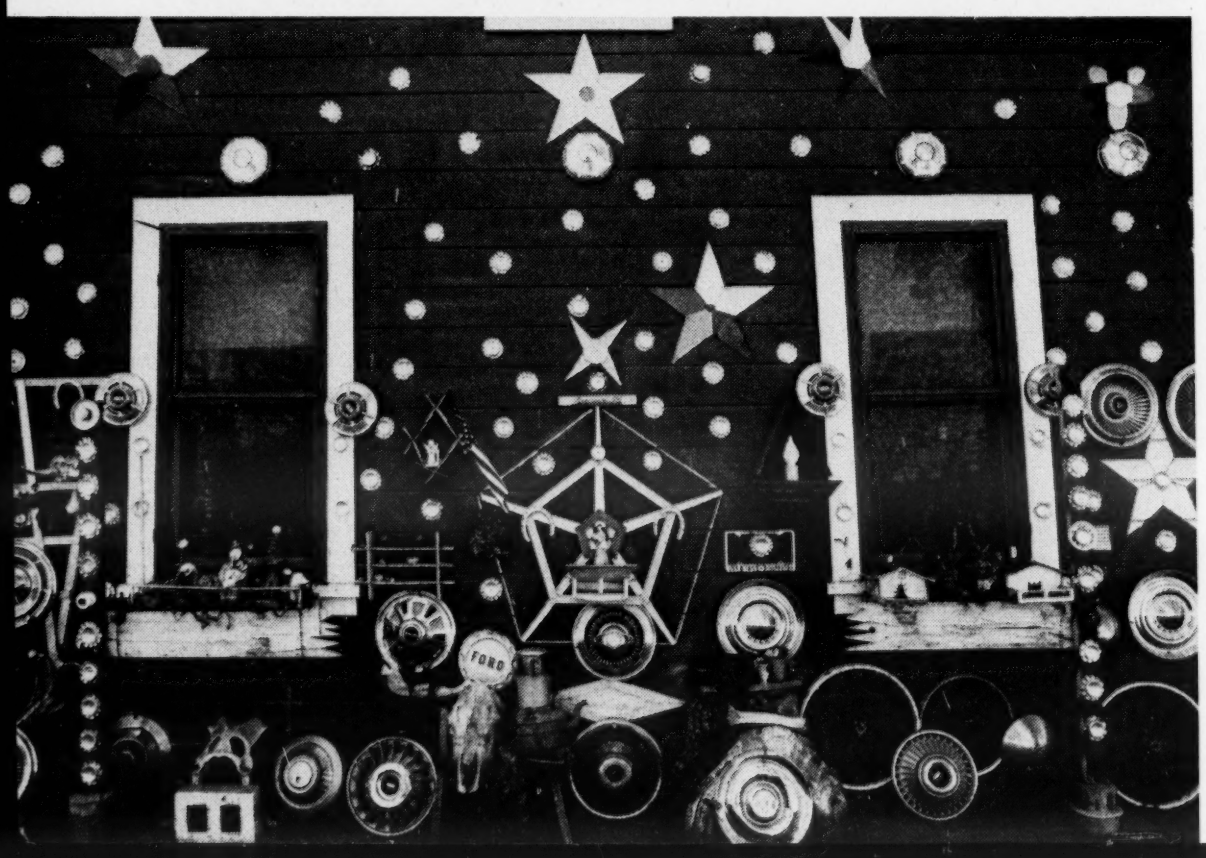
EL FINCHO RANCHO

Loren and Helen Finch bought ocean front property in Oregon in 1965, and moved onto it in 1968. Because his wife was ill and needed his attention, Loren Finch stayed close to home and kept busy by decorating his homesite. Before becoming the creator of El Fincho Rancho, Finch worked as a cartoonist, furniture dealer, and electrical contractor. His previous trades must have provided some of the inspiration and necessary skills to build his unique and personal assemblage of found objects. El Fincho Rancho's show of cheerful pride and the jaunty nautical theme disguise the ◀ *personal hardships of its residents.*



DICKEYVILLE GROTTO AND HOLY GHOST PARK

Dickeyville Grotto and Holy Ghost Park, in Wisconsin, were built by Father Matthias Wernerus (1873-1931) between 1926 and 1930. He constructed a grotto, cemetery, shrines, birdhouses, flags and a monument to Christopher Columbus with concrete, stones, marbles, shells, molten glass, uncut gems, petrified wood, and the precious personal objects brought to him by his parishioners for inclusion in the site. He apparently learned about building as he went. Once he cemented himself into a section and had to chip his way out. The site is still owned by the Holy Ghost Parish and is open to ◀ *the public.*



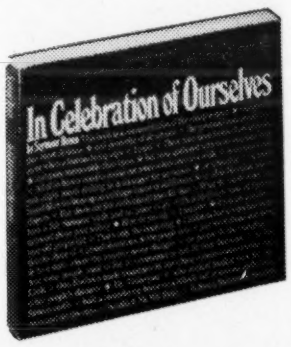
HUBCAP RANCH

When asked why he made his Hubcap Ranch, Emanuel "Litto" Damonte said, "I did it, I'm here." Three thousand hubcaps hang from buildings and trees, along with many other formerly discarded objects donated to Litto by his neighbors. Nothing went to waste here. In addition to the artful choreography of his neighbors' junk, Litto made over 200 birdhouses from scrap lumber. Hubcap Ranch was declared a California Historical Landmark just before Litto ◀ *died in 1985 at the age of 93.*

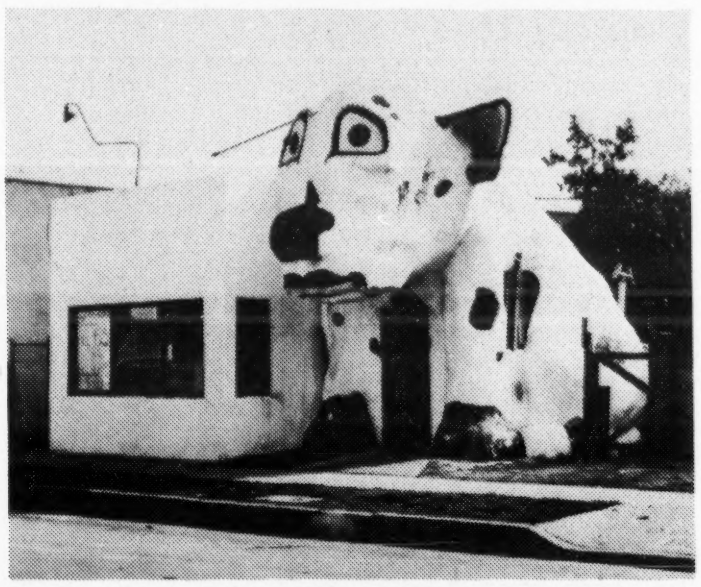
To become a supporting member of SPACES and to receive their newsletter, send $15 to SPACES, 1804 North Van Ness, Los Angeles, CA 90028.

In Celebration of Ourselves

A joyous book filled with sumptuous photographs of folk art environments, murals, parades, buildings shaped like shoes and donuts, homemade signs, county fairs, wild costumes, and more. True to its title, this book celebrates Us. —*Susan Erkel Ryan*



In Celebration of Ourselves
Seymour Rosen
1979; 176 pp.
$12.50
($14.50 postpaid) from:
SPACES
1804 N. Van Ness
Los Angeles, CA 90028



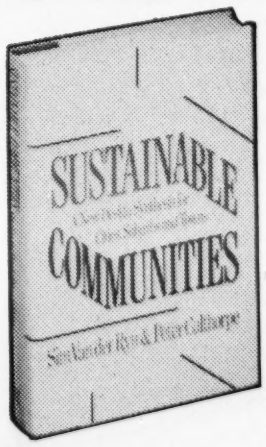
- *Shaped Buildings*. After the gold rush, realtors and others created fantastic stories of paradise to attract people to California. Some who came adopted the same flamboyant style to entice each other and the eastern tourist to their individual businesses. The landscape became dotted with three-dimensional tamales and hot dogs, shoe-shaped buildings, concrete tepee motels, drive-through donuts and giant oranges. The phenomenon thrived in the late '30s; its decline is due less to a lack of imagination and whimsy than to building codes and building costs.

- *Costumes*. We all share the need to fantasize. But most adults wait for authorized times to put on costumes and be open with their playfulness. Thank goodness for Halloween, for parades, luaus and street parties. And thank goodness for "Let's Make a Deal." When else would people who have always wanted to dress up as a tuna salad or a cabbage leaf or a firefly get the chance?

Sustainable Communities

"Sustainability implies that the use of energy and materials in an urban area be in balance with what the region can supply continuously through natural processes such as photosynthesis, biological decomposition and the biochemical processes that support life. The immediate implications of this principle are a vastly reduced energy budget for cities, and a smaller, more compact urban pattern interspersed with productive areas to collect energy, grow crops for food, fiber and energy, and recyle wastes."

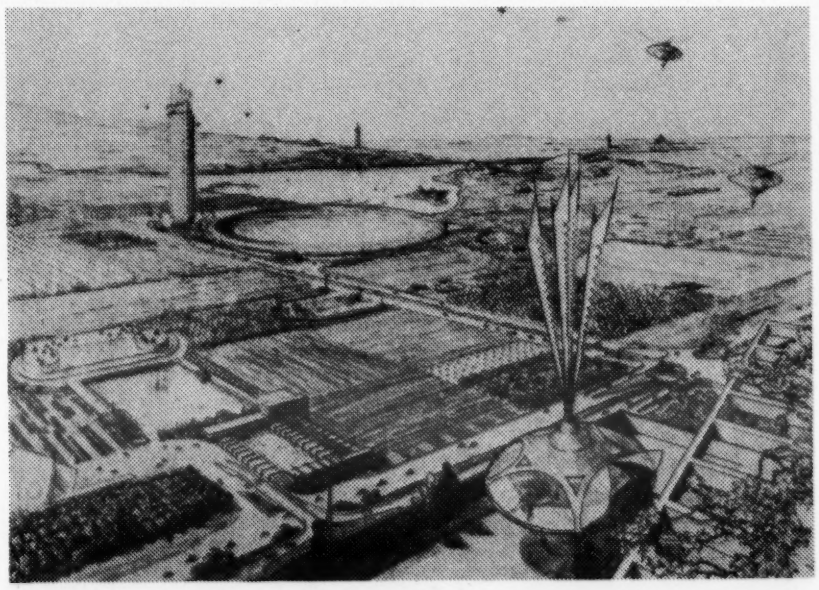
How this concept is to be implemented is what this book is about. It isn't just talk; there are case studies and lots of eminently practical ideas here, complete with the economics. The call to action is backed philosophically by seven essays from such authors as Paul Hawken and John Todd. Solid and timely, the book is a recipe for what we can and probably must do. —*J. Baldwin*



Sustainable Communities
Sim Van der Ryn
and Peter Calthorpe
1986; 238 pp.
$25
($29.50 postpaid) from:
Sierra Club Bookstore
730 Polk Street
San Francisco, CA 94109
or Whole Earth Access

- The Village Center proposal is a direct descendant of the "neighborhood school planning" dogma which dominated surburban planning a generation ago. Then, the key concept was to locate neighborhoods around a half mile walking radius of the elementary school. Today, education and other key consumer services may form the core for new pedestrian oriented energy efficient communities.

Frank Lloyd Wright's vision of a horizontal city in which work, agriculture and home were integrated was built on a grid freeway system with personal helicopters.



Tropical Rainforests

The tropical humid forests, aka "rainforests," form a somber, green girdle around the equator. Shrouded in clouds, known for their steamy heat, they may support as many as one hundred species of trees in a single acre. Here is access to the fastest disappearing bioregion of the planet. For sheer enjoyment and a solid introduction, read the extravagantly illustrated ***Jungles.*** *For a contemporary view, literate and concerned, Catherine Caufield's* ***In the Rainforest*** *reports on the destruction. For action, contact the Rainforest Action Network, which has a monthly news alert about what you can do to help. Membership* ***$25****/year, $15 low-income (includes 12 issues of* ***Rainforest Action Network Alert****); from 466 Green Street, Suite 300, San Francisco, CA 94133.* *—Peter Warshall*

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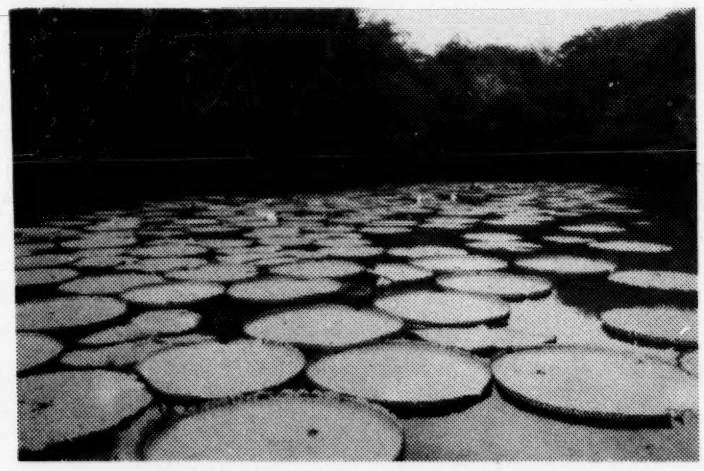
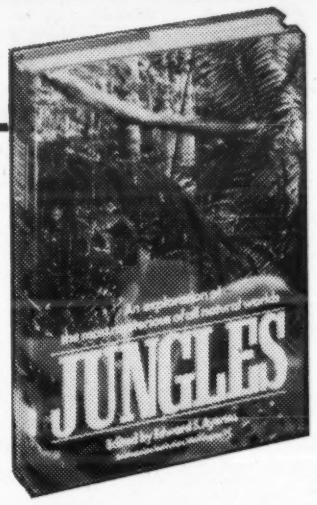
Leaves of the giant water-lily, *Victoria regia*, float on a jungle backwater in Brazil. These enormous leaves are up to 7 ft (2m) across. The pale, cream flowers of the lily open at night and some of the flower parts heat up through biochemical reactions. This distills a strong scent which attracts beetles to pollinate the flowers. Indians gather the pea-sized water-lily seeds and grind them into flour. *—Jungles*





In the Rainforest
Catherine Caufield
1985; 304 pp.
$16.95
($17.95 postpaid) from:
Random House
Order Dept.
400 Hahn Road
Westminster, MD 21157
or Whole Earth Access

Jungles
Edward S. Ayensu
1980; 208 pp.
$35
($37.90 postpaid) from:
Crown Publishers
34 Englehard Avenue
Avenel, NJ 07001
or Whole Earth Access

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Tropical rainforests are being destroyed faster than any other natural community. A United Nations study from 1976 offers the most optimistic assessment of forest loss. It found that, of the 2.4 billion acres of rainforest left in the world, 14 million are completely and permanently destroyed each year. That is almost 30 acres every minute of every day. In 1980 the U. S. National Academy of Sciences announced an even worse figure. It said that over 50 million acres of rainforest — an area the size of England, Scotland, and Wales — are destroyed or seriously degraded each year. The most comprehensive study to date, published in 1981 by the Food and Agriculture Organization of the United Nations, says that at present rates almost one fifth of the world's remaining tropical rainforest will be completely destroyed or severely degraded by the end of the century.
—In the Rainforest

Biophilia

Edward O. Wilson, eminent biologist and sociobiology pioneer, here reminisces, philosophizes, and waxes poetic. With compelling clarity and lyricism, employing anecdotes from his boyhood in backcountry Florida and fascinating observations from his life as a field biologist, he evokes within the reader "the innate tendency to focus on life and lifelike processes" — biophilia. He contends that we have evolved a tendency — even a need — to notice and to be involved with other forms of life. "We stay alert and alive in the vanished forests of the world."

From this biophilic point of view, Wilson makes the most persuasive case for conservation I've ever read. Every species on the planet, he points out, is an encapsulated evolutionary history containing useful compounds and properties, and every vanished species is utility forever lost. But even more important, the daily obliteration of whole species is a slow strangulation of our essential need for life's diversity, our biophilia.

I hope that this heartfelt scientific psalm is widely read — and heeded. *—Ted Schultz*

•

No other animals have evolved the ability to turn fresh vegetation into mushrooms. The evolutionary event occurred only once, millions of years ago, somewhere in South America. It gave the ants an enormous advantage: they could now send out specialized workers to collect the vegetation while keeping the bulk of their populations safe in subterranean retreats.

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The deepening of the conservation ethic requires a greater measure of evolutionary realism, including a valuation of ourselves as opposed to other people. What do we really owe our remote descendants? At the risk of offending some readers I will suggest: Nothing. Obligations simply lose their meaning across centuries. But what do we owe ourselves in planning for them? Everything. If human existence has any verifiable meaning, it is that our passions and toil are enabling mechanisms to continue that existence unbroken, unsullied, and progressively secure. It is for ourselves, and not for them or any abstract morality, that we think into the distant future. The precise manner in which we take this measure, how we put it into words, is crucially important. For if the whole process of our life is directed toward preserving our species and personal genes, preparing for future generations is an expression of the highest morality of which human beings are capable. It follows that the destruction of the natural world in which the brain was assembled over millions of years is a risky step. And the worst gamble of all is to let species slip into extinction wholesale, for even if the natural environment is conceded more ground later, it can never be reconstituted in its original diversity. The first rule of the tinkerer, Aldo Leopold reminds us, is to keep all the pieces.

Biophilia
Edward O. Wilson
1984; 157 pp.
$6.95
($8.45 postpaid) from:
Harvard University Press
79 Garden Street
Cambridge, MA 02138
or Whole Earth Access

With the Contras

After seeing what good publicity close-up reporting had given the Salvadorian rebels and the Sandinistas, the contra leadership figured it could work for them, too, maybe even create a few heroes, so they let a couple of gringo reporters accompany their troops on a mission. What they didn't take into account was that the product they were selling was different, as were the qualities of the heroes they were promoting.

One of the reporters was Christopher Dickey of the ***Washington Post****, and one of the potential heroes was a former Somoza National Guardsman known as Suicida. As a sergeant in 1979, he'd led a group of half-dead Guardia out of Nicaragua after the Sandinista victory.*

Dickey accompanied Suicida and his troops on a raid into Nicaragua, and this action is the basis for the book, but woven into it is the history of the entire contra movement. The story ranges from Washington and Miami to Tegucigalpa and Guatemala and introduces CIA and contra personalities like the mercurial Eden Pastore, aka Comandante Cero.

Following Suicida and his troops as they alternate bloody raids into Nicaragua with drunk nights back in their Honduran camp where they blow each other away gives readers a feel for "low intensity warfare," the Pentagon label for post-Vietnam actions in the Third World. For good measure, Dickey also shows us the other side of the Sandinistas, which isn't all sweetness and light. Running an impoverished country being strangled by the colossus of the north eliminates some of the politeness that more comfortable nations can offer opponents.

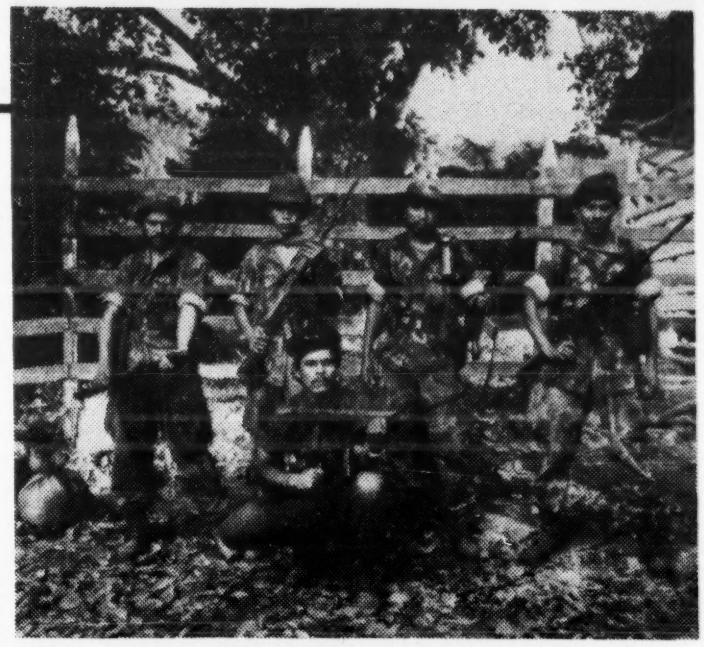
By book's end, Suicida and his fellows, though never making hero status, still become memorable characters, both from their intensity in life and their grim conclusion, so similar to that of their many victims. This book should be required reading for anyone interested in Central America.
—Dick Fugett

•

Visage had led the attack on Radio Noticias for the Argentines in 1980, then spent a year in Costa Rica's jails. He won his freedom when he planned, and his buddies executed, the hijacking of a local Costa Rican airliner. But plagued by disaster, he was arrested again in El Salvador when his pilot made the mistake of setting down there rather than in a secure strip arranged for him across the border in Guatemala. Another year in prison, but this time defended and protected by the ultra-rightists of Roberto d'Aubuisson's political network. The U.S. embassy officially fought to have him freed. D'Aubuisson's people won. A protege of Somoza's son. A terrorist in Costa Rica. An airplane hijacker. A close friend of the men who sponsored El Salvador's death squads. This was the man who was supposed to clean up the operations of the FDN.

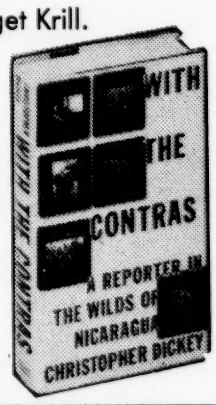
The Agency accepted him.

One of his first assignments was to get Krill.



Suicida and some of his field commanders pose for a picture at his temporary headquarters near Arenales.

With the Contras
Christopher Dickey
1985; 327 pp.
$18.45
($19.95 postpaid) from:
Simon & Schuster
200 Old Tappan Road
Old Tappan, NJ 07675
or Whole Earth Access



The Viet Vet Survival Guide

This book is mainly about the Veterans Administration (VA). It advises veterans to be patient, type your forms, and consult your service representative. It encourages you to apply for benefits you think you deserve and to appeal rulings you think are wrong. Good service representatives and the VA itself encourage the same thing. Most vets who are severely disabled know it already.

Chapters on upgrading your discharge, correcting your records, medical services, and getting VA loans are likely to be of assistance ten years after the war. The chapter on Agent Orange will be most widely read.

The chapters on psychological adjustment, post-traumatic stress disorder, and where to go for help come the closest to promoting real healing. The book's gentle tone and quiet persuasion to fight for our rights feels good too.
—Jon James [Suggested by Hank Roberts]

•

"Post-Traumatic Stress Disorder" is a new term for an old psychological condition. In this century it has been called by names including "shell shock," "combat fatigue," "war neurosis," and "survivor's syndrome." During and after the Vietnam War, it has been called by names including "Vietnam Stress," "Post-Vietnam Syndrome" ("PVS"), and "Delayed Stress."

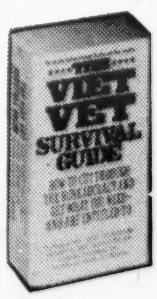
PTSD did not "officially" exist — in *The Diagnostic and Statistical Manual of Mental Disorders (DSM)* and at the VA — until 1980. In that year, *DSM (Third Edition)* recognized PTSD as a disorder that could be diagnosed. And in that year, the VA added PTSD to its list of disabilities that could be rated and for which disability compensation could be paid.

•

The biggest hole has nothing to do with the kind of education the vet wants to undertake. It has to do with time. This hole is called the "ten-year delimiting date." It means that with few exceptions the vet must use his G.I. Bill benefits within ten years of separation from active service. More on that later. But keep it in mind. Also keep in mind that for all Vietnam Era Vets the G.I. Bill expires on December 31, 1989.

The Viet Vet Survival Guide
Craig Kubey,
David F. Addlestone,
Richard E. O'Dell,
Keith D. Snyder,
Barton F. Stichman and
Vietnam Vets of America
1985; 328 pp.

$4.50
postpaid from:
Vietnam Veterans
of America
P. O. Box 3666
Santa Rosa, CA 95402
or Whole Earth Access



Working Assets

Imagine a credit card company whose promotional material emphasizes the perils of consumer debt, urges you to pay your bill promptly, and then goes on to outline corporate involvement in weapons development. No, it's not some stoned, Aquarian fantasy — it's a living, breathing money market fund known as Working Assets, and it's now offering its own Visa card, but with a twist.

My opinion of plastic money changed considerably after I found out about this outfit. When a person becomes a cardholder, Working Assets automatically contributes $2 to a fund that is distributed to organizations ranging from Oxfam and Amnesty International to Greenpeace and the American Civil Liberties Union. Each time thereafter that the card is used, Working Assets will kick in 5¢ more. This may not be the triumph of the working class as foreseen by Marx, but then Karl couldn't have predicted all the nooks and crannies of consumer contradiction we live with today.

*Along with Calvert, a Boston-based money market fund, Working Assets broke ground in 1983 with the idea of socially responsible investing (**CQ** #38, p. 90) and has grown rapidly. Through Working Assets alone, some 10,000 people have invested $83 million in firms that shun South Africa and neither pollute, build weapons, nor bust unions.*

Now Working Assets has come out with a Visa card that carries that philosophy further. By the end of the year, a board of trustees will divide an estimated $100,000 among worthy groups. Next year there'll be a system that will allow the cardholders to select recipients. Working Assets also has a plan for large, nonprofit groups to raise money by offering the card to their memberships. As the motto on their wall says, "Earn interest on your principles."

—Dick Fugett

Working Assets

Information **free** from:
Working Assets
230 California Street
San Francisco, CA 94111

The Animals' Agenda

*The **Animals' Agenda** is a must for anyone interested in keeping up to date on animal rights. Independent of any particular animal organization, the magazine freely explores the issues and controversies behind the headlines, and offers a unique and open forum for participation to all parties concerned.* *—Bradley Miller*

•

Karen, 38, a health care worker in a large eastern city, is one of the members of the Animal Liberation Front who broke into the Head Injury Clinical Research Center at the University of Pennsylvania in May 1984. In the most widely-publicized break-in of its kind, the AFL stole more than 60 hours of videotapes of experiments and initiated an exhaustive campaign that led ultimately to the Center's closing.

For over 13 years, the Center had used hundreds of unanesthetized baboons to study the effcts of head injuries. In the studies, which cost taxpayers nearly $1 million a year, baboons had their heads plastered to a machine which delivered blows as great as 1,000 times the force of gravity. Then, on Memorial Day, 1984, the ALF team entered the laboratory and took the tapes, which had been made by the experimenters themselves as part of their record-keeping routine.

Faroese men load headless pilot whales onto truck for distribution around the islands. Sea Shepherd Conservation Society is working to prevent such slaughter.

Publicity about the baboon bashing at the University brought forth protest after protest, culminating with a four-day sit-in at offices of the National Institutes of Health in July. . . . On the fourth day of the sit-in, Health and Human Services Secretary Margaret M. Heckler ordered NIH to suspend its $1 million-a-year grant to the head injury lab. . . . Within weeks, Secretary Heckler announced that funding to the lab would remain under suspension because the researchers had "failed materially to comply with the conditions of their grant with respect to the care and use of non-human primates."

•

The focal point of the Australian animal rights movement for the past two years has been a major two-year government inquiry into all aspects of animal welfare in the country. The all-party Senate Select Committee, which is charged with investigating the status of animals in Australia, recently handed down its first report, which is on the live sheep trade. Australia annually exports seven million live sheep to the Middle East for slaughter. It has been described as the largest mass movement of animals by sea in the history of the world, As many as 50,000 animals at a time are crowded onto one ship for a miserable three-week journey. Disasters abound; in one incident, a carrier sank drowning 40,000 sheep. In another, 16,000 sheep died from extreme heat before they could be unloaded.

The Animals' Agenda

Jim Mason, Editor
$18/year
(10 issues) from:
Animals' Agenda
P. O. Box 5234
Westport, CT 06881

Poison Oak & Poison Ivy

Poison Oak & Poison Ivy
Sandra Baker
1979; 40 pp.

$3 postpaid from:
Sandra Baker
Box 513
Soquel, CA 95073
or Whole Earth Access

I've already had two bouts with poison oak this season, the second as a result of wearing the same shirt — after laundering — that I was wearing when I contacted the plants that gave me the first case.

Urushiol is the active ingredient in poison oak, ivy, and sumac. It is the most powerful allergen known and in extreme cases has caused kidney damage and, after breathing smoke from burning plants, death from severe respiratory complications.

This little book offers well over 100 remedies to choose from, of both "scientific" and traditional origins, with longer discussions of the treatments you are likely to receive from your health practitioner. There are short chapters on prevention, developing an immune tolerance, commercial products, plant removal, and other peripheral subjects.

Only 15 percent of us, those whose bodies truly tolerate urushiol assault, will never need this book.

—Don Ryan

•

Urushiol is amazingly stable. Several hundred year old herbarium specimens have been known to produce a rash in a sensitized individual who has handled them. Being non-volatile, the oil urushiol cannot evaporate into the air, so the saying "I only have to walk by a plant to get it" is not true.

•

An allergy never manifests itself the first time the body is exposed to an antigen. The immune system is either not affected, or it starts to build "defenses." The next exposure might stimulate a typical allergic reaction, or it may take numerous exposures before the body finally manifests the symptoms. The young and old of the general population develop urushiol dermatitis to a lesser degree than those in the middle years. Presumably the young have not been exposed often enough to develop an allergy, and the immune system of the elderly does not react with the strength of younger years.

•

The skin of the mango contains urushiol in small amounts. For those people extremely sensitive, or who are afraid to eat a poison oak or ivy leaf, you might try eating pieces of a mango skin. Apparently it contains enough to be effective, because a few people mentioned that they break out around the outside of their mouth when they eat mangos without skinning them first.

•

Herbal liniment:

People have had good results with this liniment from the book *Back to Eden* by Jethro Kloss. I applied some to a small patch of poison oak rash and the itch went away immediately. If you make the liniment and it doesn't work, all is not lost. You will be able to use this healing formula for many other skin problems, plus rheumatism aches. Apply it often for athlete's foot.

2 oz powdered myrrh
½ oz cayenne
1 oz golden seal
1 quart rubbing alcohol

Shake each day for seven days. Apply the liniment every few minutes for an hour or so. It might sting a bit. It is very good for drying up blisters.

OAK

SUMAC

IVY

Inexpensive Geiger Counters

A few years ago, while I was living in Santa Fe, I read in the newspaper that a truck carrying some radioactive rebar was discovered when it set off alarms in Los Alamos. I recall that there was a recall of Mexican rebar. Local suppliers advertised "American rebar."

Last year, here in North Carolina, I read in ***Science*** *magazine that this rebar had been made in Mexico by a foundry that got its steel from a junk yard that had received a container of radioactive pellets from an old X-ray machine. The container had been punctured, and the pellets, shaped like ball bearings, had been spilled around the junk yard, later to be picked up by the foundry, which melted them together with the other scrap steel used in making the rebar. Another foundry had purchased scrap steel from the same place and made table legs that were shipped to several different countries where they were used to make restaurant tables, giving numerous patrons sizeable doses of radiation. The legs were traced through sales records and were retrieved. But soon after, word came out that radioactive plumbing parts from the Orient had turned up in California.*

This made me nervous. What had I brought home that was radioactive? I pulled the ***Next Whole Earth Catalog*** *off the shelf. On p. 382, I found the Nukebuster, which meters Alpha, Beta, Gamma and X-ray radiation. Cost $280 (1980). I wrote Solar Electronics, P. O. Box 39, Summertown, TN 38483 for a less expensive model. The reply described the Monitor 4 for $200. I also wrote Heathkit (****NWEC****, p. 520). Their most recent catalog contains a Monitor 4 kit for $150. I ordered one immediately.*

The Shearon Harris Nuclear Power Plant, 17 miles from my home as the rays fly, is due to load its nuclear fuel in a month. The Coalition for Alternatives to Shearon Harris, a voice for the local people who don't want this kind of poison so close to home, is working hard. The Chernobyl disaster has opened a lot of people's minds to the danger of a supposedly safe nuclear power plant. This excerpt is from "Born of the Atom," in ***Soviet Life****, Feb. 1986, and concerns the Ukraine's first nuclear power plant, Chernobyl:*

TOTAL SAFETY

> *Nikolai Fomin, the plant's chief engineer, believes that both man and nature are completely safe. The huge reactor is housed in a concrete silo, and it has environmental protection systems. Even if the incredible should happen, the automatic control and safety systems would shut down the reactor in a matter of seconds. The plant has emergency core cooling systems and many other technological safety designs and systems.*

The ***New York Times*** *reports that the containment at Chernobyl, contrary to early reports, was indeed massive. "The structure, 200 feet long, 70 feet high and 70 feet wide, is inside the heavily damaged reactor building and has steel walls 1 to 2 feet thick backed by concrete 6 to 8 feet thick."*

If the Shearon Harris plant goes into operation, a geiger counter may not be enough. *—Sandy Stewart*

Heathkit Monitor 4 Radiation Detector
$150
Information **free** from:
Heathkit
Benton Harbor, MI 49022

M.O.M. Magazine

This is a great little mag for those into alternative birthing and other natal subjects. The ads in it make it a local rag, but the articles are of national interest. The latest issue has pieces about cesarean births and breastfeeding. The price is right, $1.50 an issue, put out quarterly, and it is a good way to keep in touch with the idea that pregnancy and birth are natural phenomena and not diseases.
—Andrea Sharp

•

Two years ago, while pregnant, I sat down and calculated the cost of disposable diapers, formula, day care, work clothes, make-up, gasoline, wear and tear on the car, lunches and snacks at work, an additional 10 percent on my food bill for convenience dinners, plus the additional taxes we would pay on my husband's income due to my wages upping his tax bracket. I decided to stay home and breastfeed and use cloth diapers.

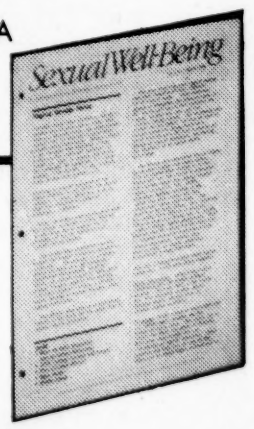
My child is happy having me home, my house is clean. I'm less frazzled; and even though I had to end up supplementing with formula, we still don't miss the $1.25 per hour that I would have netted out of a gross of $5.25 per hour.

M.O.M. Magazine
Lloyd McGrath and
Anne Zimmer, editors
$6/year
(4 issues) from:
M.O.M.
P. O. Box 3164
Huntington Beach,
CA 92647

NOCIRC

I've always felt that, in decisions pertaining to my body, 3.5 billion years of evolution take precedence over a few hundred years of modern medical wisdom. As a result of this logic, I still have my tonsils and appendix. Unfortunately, I was denied this freedom of choice about my foreskin. According to the crusading folks at NOCIRC (National Organization of Circumcision Information Resource Centers), the American Academy of Pediatrics declared way back in 1971 that there are no medical reasons for performing circumcisions; in 1984 they concluded that there are numerous medical reasons for not doing them, including hemorrhage, infection, mutilation, and, of course, unnecessary suffering and trauma. The only reason for this routinely performed unnecessary surgery is cultural, and, in light of this, NOCIRC preaches that the right of choice belongs to the owner of the organ in question. They've produced a videotape on the subject, they publish a newsletter, and they're even backing legal action to stop routine circumcision. Their free information packet is must reading for anyone who might be expecting a boy-child.
—Ted Schultz

NOCIRC
(National Organization of Circumcision Information Resource Centers)
Information **free** from:
NOCIRC
P. O. Box 369
Corte Madera, CA
94925-0369



Sexual Well-Being

First of its kind — an informative, fascinating newsletter covering all aspects of sexuality, written by experts for the general public. Articles range from surveys of sociological trends — the spread of AIDS, misinformation about birth control in teens — to helpful physiological information — achieving female orgasm during intercourse, erection physiology — to useful advice for improving your sex life. A "Briefly Noted" section at the end summarizes sex news and publications.
—Joani Blank

•

Less than half of American adolescents, in eight separate surveys, could correctly identify mid-cycle as the time a woman is most likely to get pregnant. Blacks were twice as likely to give the wrong answer as whites. These and other findings suggest that many teenagers "build their contraceptive decisions on a base of considerable misinformation," according to a recent review.

•

An especially important sexual routine is created by an implicit rule that sex, once begun, must not be interrupted, much less discontinued. In sex, most of us are oppressed by a fear of interruptions. This fear always gets confirmed as in the case of being turned off by stopping to put on or put in a contraceptive device. However, it is the fear itself that creates this effect. If breaks are part of a couple's sexual style, stopping can often create higher levels of arousal. A familiar example of this is the practice of breaking briefly and repeatedly when high levels of arousal are reached, which can result in even greater arousal when sex is resumed. This is because of the tendency to respond to sexual excitement by accelerating, which makes everyone more tense, and tension is inhibitory. Breaks relieve the tension.

Sexual Well-Being
Diane L. Morrissette, Ph.D.
Editor
$36/year
(12 issues) from:
Sexual Well-Being
P. O. Box 60332
Palo Alto, CA 94306

•

If you're a sexually active woman, what is the likelihood that you'll be exposed to the AIDS virus? Are there sexual behaviors that increase the probablity? The answers to these and related questions are now being researched by Judith Cohen, Ph.D., and Constance Wofsy, M.D., at San Francisco General Hospital.

Included in the study are women who have been sexual with 5 or more men during the last 3 years (most have had 10 or more partners), those whose sexual partners are men in an AIDS risk group, and those whose partners have AIDS or are antibody positive. . . .

Preliminary results suggest that about 4 percent of these sexually active women are antibody positive. This figure is much higher than for the general population where it's estimated to be less than 1 percent. But, on the other hand, it is far less than among men and women in other high risk groups, says Cohen, an epidemiologist. In San Francisco, for example, at least 10 percent of the IV drug users are antibody positive.

The Bloom in Women's Erotica

*In the past, woman-written erotic stories were limited to Nancy Friday's fantasy books (**My Secret Garden** and **Forbidden Flowers**) or classics like Anais Nin's **Delta of Venus** or Pauline Reage's **The Story of O.** Over the past two years, there has been a virtual revolution in the publication of hot, sexy, and surprisingly candid fiction by women authors. Leaving Harlequin Romances in the dust, the new women's erotica goes wherever an aroused woman's imagination goes, and the results have been refreshing; in some cases, splendid.*

***Alida: An Erotic Novel** may be the only contemporary women's sex novel in print today. The story concerns Alida, a swinging single mother, and her lusty affairs on the beach one summer with all types of men. The infamous Phyllis and Eberhard Kronhausen (authors of **The Sexually Responsive Woman** and **Erotic Art**) recommended Alida as "a positive turn-on, especially though not exclusively for women."*

*The Kensington Ladies' Society, authors of **Ladies' Own Erotica**, are just like the way they sound: "An improbable group of women over 40, for whom dashing off an erotic story was sandwiched in between the supermarket and trips to the dentist." But their book is actually much more carefully considered than the ladies claim, and contains such immortal chapters as "Address to a Penis-Owner." An anthology of essays, drawings, and fantasies that is often amusing and provoking.*

*Lonnie Barbach's **Pleasures** is an anthology of true stories about women's sexuality. Barbach, who is the only author besides Friday and Shere Hite to hit the bestseller list with nonfiction on female sexuality, has compiled here an anthology of well written, reasonably diverse short erotic stories. Good plots and intelligent, horny women, mostly heterosexual, are its chief characteristics.*

***On Our Backs** is an erotic, outrageous, candid, and irreverent quarterly that provides "sexual entertainment for the adventurous lesbian." The lesbian community will never be the same, and heterosexuals will also learn a few new tricks. Contents include photographs, fiction, and sex-related essays. Ask a sex-positive lesbian for confirmation — I edit this.*

*And finally, Joyce Farmer's **Tits and Clits** is an erotic comic book for women.* —*Susie Bright*

•

When we leave the store, he keeps his arm around my waist. I lean into him. We fit. My hip, slightly higher than his, curves neatly into his waist; his shoulder tucks into my armpit; I curve my arm over his shoulder, around his back to his waist. His hair smells soft, slightly sweet

—Ladies' Own Erotica

around the sideburns. The skin of his cheek is faintly downy and golden, like the skin of a ripe apricot. The curve of his neck smells like musk.

We walk west like old lovers. —*Pleasures*

•

"No, that was my husband. He says he'll be here tomorrow night." She seemed lost in thought. Matt went over to her and brushed her hair off her face, ready to say goodbye. She pulled his head down and kissed him. He kissed her breasts, and he buried his head in her lap. She let him stay there. After a while he asked if he could look at her. Her knees opened, parting the folds of her silk robe. He could see her pubic hair between her slender thighs and touched her soft petals, gently prying her apart like a rose.

"I like that," she whispered, "kiss me there."

He felt the moist folds, the different textures of flesh and skin and hair. She shivered and moaned, telling him when to stop and when to begin again. Finally, she whispered; "You see, I am learning too. Nobody has ever done this to me before." —*Ladies' Own Erotica*

•

They both slept soundly, and when Alida woke she saw him lying on his side, looking at her. She smiled at him and started to move closer so she could kiss him, but then she saw a look on his face she had never seen before. Nothing moved on his face. It was tense, and his eyes gaped open at her. In a flicking instant she saw a look of horror and she imagined that he saw an ancient crone with ratty teeth and warty skin. She knew it was over. —*Alida: An Erotic Novel*

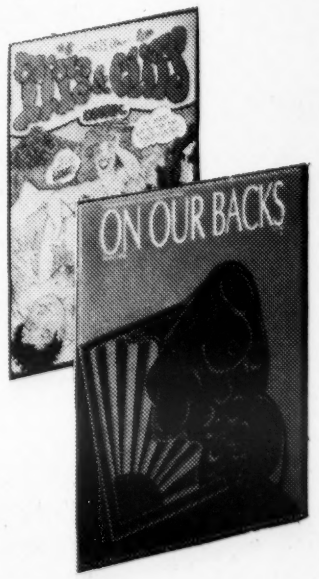
Alida:
An Erotic Novel
Edna MacBrayne
1981; 180 pp.
$9
($9.50 postpaid) from:
Parkhurst Press
P. O. Box 143
Laguna Beach, CA 92652

Ladies' Own Erotica
The Kensington Ladies' Erotica Society
1984; 231 pp.
$8.95
($9.95 postpaid) from:
Ten Speed Press
P. O. Box 7123
Berkeley, CA 94707
or Whole Earth Access

Pleasures
Lonnie Barbach, Ph.D.
1984; 345 pp.
$6.95
($8.45 postpaid) from:
Harper & Row, Publishers
2350 Virginia Avenue
Hagerstown, MD 21740
or Whole Earth Access

Tits and Clits
32 pp.
$1.25 per issue
($2.05 postpaid)
Publications list **free**
Both from:
Nanny Goat Productions
P. O. Box 845
Laguna Beach, CA 92652

On Our Backs
Susie Bright, Editor
$15/year
(4 issues) from:
On Our Backs
P. O. Box 421916
San Francisco, CA 94142



Self-Hypnosis Cassette Tapes

The personal-growth movement has spawned a booming industry in self-hypnosis cassette tapes that promise to do everything from increase your bustline to clean up your karma from past lives. Outrageous claims notwithstanding, such tapes can be powerful tools to change old habits, and many are used in hospitals for stress management and to accelerate healing.

Exactly how hypnosis works is poorly understood, though clinical experiments have verified its effectiveness in a bizarre range of applications including inducing or dispelling allergic reactions, control of blood flow, and anaesthesia. In one such study, adult women led through relaxation exercises for twelve weeks were asked to visualize their breasts enlarging. Eighty-five percent showed a significant increase, 46 percent increased by at least one bra size, and 42 percent had a spontaneous weight loss greater than four pounds and still had breast enlargement. A replication of the experiment achieved similar results, with a follow-up study three months later showing that most of the gains were retained.

The hypnotic state is similar to a daydream or a pre-sleep state in which the conscious attention is disengaged. This state is generally induced by suggestions to focus on your breathing and let go of tension in specific parts of your body, often by first tensing those muscles, then releasing the tension ("progressive relaxation"). Sometimes this is accompanied or followed by guided fantasy in which you're asked to picture being in a certain environment and to experience all the sensations of actually being there. As you relax more deeply, suggestions are given that relate to the problem you're working on. These usually combine releasing old concepts, emotions, or self-images, and replacing them with vivid and specific images of reaching your goal.

Some of the major cassette producers who follow this format are: ***Effective Learning Systems, Success World Cassettes, The Institute of Human Development, Potentials Unlimited,*** *and* ***Source Cassettes.*** *In all of these, the suggestions are given by pleasant, authoritative male voices with music or nature sounds sometimes woven into the background. My favorite is* ***Effective Learning Systems,*** *whose catalog lists about 50 titles mostly dealing with health or psychological topics; the tapes provide a pleasing balance of relaxation exercises with guided fantasy, vocal suggestions with subtle background music and sounds, and practical advice at the conscious level with well-phrased hypnotic and post-hypnotic suggestions soundly based in modern psychological theory.* ***Success World*** *uses stereo technology to mix the vocals in your right ear with tones with supposed subliminal impact in your left. The* ***Institute of Human Development*** *uses video game sound effects for cancelling negative images, and*

Potentials Unlimited *overuses such corny cliches as "You are a child of the universe, you have a right to be here."* ***Source Cassettes*** *are produced by Dr. Emmett Miller, a physician concerned with the role of stress in health, whose suggestions are entwined with the music of prominent "New Age" composers. Another physician who produces self-healing meditation cassettes is* ***Dr. Carl Simonton,*** *a cancer specialist whose program is offered in conjunction with traditional treatments such as radiation or chemotherapy and has achieved exciting results.*

Other more unusual approaches are offered by ***Changeworks,*** *which blends three voices speaking different phrases at the same time in what they call "multi-evocation," based on the concepts of neurolinguistic programming, and* ***Hypnosis Plus,*** *featuring an ethereal female voice invoking white light and spirit guides against a background of drifting, hazy music — you can almost smell the incense.*

Many of the tapes are also available in a subliminal format in which the messages are masked beneath music or surf sounds. The effectiveness of subliminal programming is an area of great controversy — if it works as well as its proponents claim, it could have vast repercussions in all areas of our lives. The Behavioral Engineering Center in Metairie, Louisiana, markets a device that mixes subliminal messages into the ambient music piped into stores and offices, with which they claim they have reduced shoplifting and employee theft by 37 percent in one large East Coast department store chain with the message, "I am honest, I will not steal," repeated 9000 times per hour under the music. The FCC has issued warnings against TV or radio subliminals, but this does not necessarily prove their effectiveness. The alleged advantage of the subliminal format is that you can go about your daily routine listening to tapes in a fully conscious state while deriving the same benefits as in the hypnotic state. If you wish to try this, the brands with the most listenable music are ***Success World, Potentials Unlimited,*** *and* ***Institute of Human Development.***

—Rebecca Wilson

Effective Learning Systems, Inc.
Catalog **free** from:
Effective Learning
Systems, Inc.
5221 Edina Ind. Blvd.
Edina, MN 55435

Source Cassettes
Catalog **free** from:
Source Cassettes
P. O. Box W
Stanford, CA 94305

Institute of Human Development
Catalog **free** from:
Institute of Human
Development
P. O. Box 1616
Ojai, CA 93023

Potentials Unlimited, Inc.
Catalog **free** from:
Potentials Unlimited, Inc.
4808-H Broadmoor, SE
Grand Rapids, MI 49508

Success World Cassettes
Catalog **free** from:
The Mind's Eye
Box 6727
San Francisco, CA 94101

Simonton Cancer Center
Catalog **free** from:
Simonton Cancer Center
875 Via de la Paz, Suite C
Pacific Palisades, CA 90272

The Changeworks
Catalog **free** from:
The Changeworks
P. O. Box 4000-D
Berkeley, CA 94704

Hypnosis Plus
Catalog **free** from:
Hypnosis Plus
P. O. Box 188
Bloomfield, CT 06002

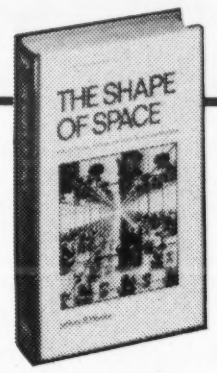
The Shape of Space

Be the first on your block to see how the universe is woven.

The Shape of Space *is that rare popularization that makes mathematics accessible without sacrificing its rigor. There are lots and lots of pictures. The author does more than offer the standard topology popularizer's jabber about "rubber sheet geometry" and "doughnuts deformed into coffee cups." Instead, he offers what are deceptively called "exercises," all quite comprehensible, none too big a jump for the tentative layperson. If he wants you to understand a tricky, hard-to-imagine object (like a Klein bottle, which requires a hop through the fourth dimension), he leads you to it through surfaces like the Moebius strip (which only requires an excursion through the third dimension). If you follow the exercises, you find by the middle of the book that you are calculating things about arcane spaces with a growing sense of confidence and pleasure.*

Since the 1600s, mathematics has been ahead of physical science, and mathematical ideas that seem ferociously abstract pop up a few years later in practical tools. I look forward to seeing how this book's flexible universes and space-time tunnels will enter daily life.

—Birrell Walsh



The Shape of Space
Jeffrey R. Weeks
1985; 324 pp.
$49.95
($51.25 postpaid) from:
Marcel Dekker, Inc.
270 Madison Avenue
New York, NY 10016

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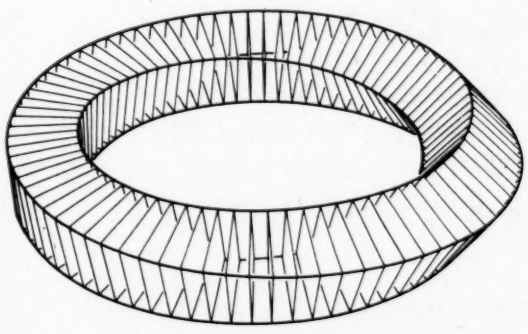
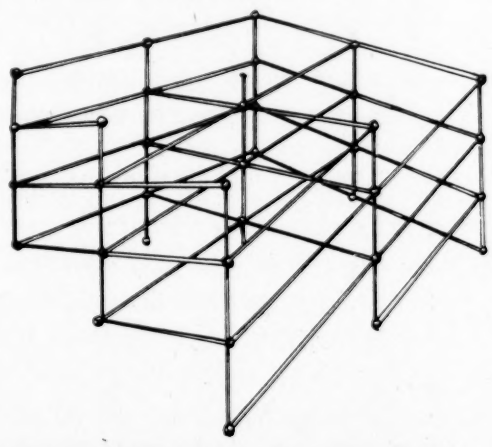
Many authors claim that you cannot visualize four-dimensional space. This simply isn't true. (It is true that you must visualize E^4 differently than E^3.) My personal opinion is that your mind is as *capable* of visualizing four dimensions as three. The reason three dimensions is so much easier in practice is that the real universe is three-dimensional: from the day you were born you've been getting practice in understanding three dimensions. At first visualizing four dimensions is difficult and tiring — just as newborn babies no doubt find three dimensions confusing at first. With practice it becomes easier.



If you physically glue a cube's top to its bottom with a quarter turn you'll get a solid like this. Technically the solid has only one side which wraps around four times. But locally it has four sides.



A jungle gym in a twisted Euclidean manifold.

Gnosis

Gnosis is the kind of knowledge you get when you meet God. Truth. Western spiritual traditions are full of mystics who sought this gnosis, this direct experience of the divine. But their teachings — alchemy, Gnosticism, the Kabbalah, mysticism, magic, Sufism, to name but a few — aren't widely known due to frequent persecution by orthodox religious authorities. What is known tends to make these traditions seem like strange, primitive islands.

Former ***Whole Earth Review*** *editor Jay Kinney has founded a magazine called* ***Gnosis*** *to help bring western inner traditions back into the light. Westerners in search of spiritual growth and illumination need not borrow the path from other cultures; we can look in our own back yard. Each issue of* ***Gnosis*** *roots expertly through one theme (e.g. Gnosticism, Magic and Tradition) with academic and ecstatic voices speaking side by side. I love the feeling of guided ferment on these pages; the reader is prodded into complex learning as the variations and controversies within each tradition are allowed to educate about its essence. The letters section is packed with impassioned and erudite debate. These 50-page texts are meaning in the making.* *—Jeanne Carstensen*

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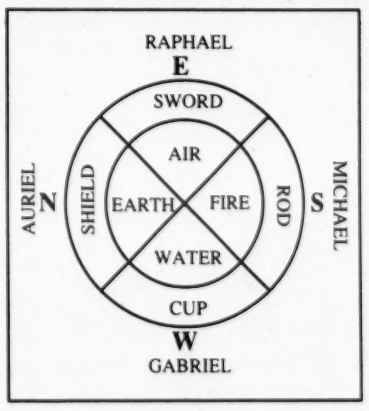
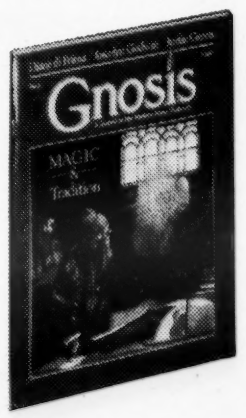
Just as Jung underscored the parallels between the Great Work of the Alchemists and the process of Individuation undertaken by those in psychotherapy, some twentieth-century magicians (most notably Dion Fortune and Gareth Knight) have drawn upon Jungian theory in their discussions of magic. At the risk of grossly simplifying this analysis, the Inner Planes are associated with the Unconscious (both personal and collective, depending upon the plane); the angels, demons, and other entities are seen, for the most part, as personifications of archetypes or complexes; path-working or astral travelling become exercises in Creative Imagination; and the Magician's Work — like the Alchemist's — becomes an approach to Individuation. Even Jung's theory of synchronicity is drawn in to account for the changes and events that occur in the wake of magical work.

•

This, then, is the predicament in which we "Hermetic Academicians" find ourselves, perhaps as clerics of the fourteenth century did when the schism and abuses of the Church cast all its value in doubt. But now, as then, we cannot deny that the materials are there to work with. The Natural Sciences could have the whole Book of Nature to learn from, if they would abandon the mechanistic and materialist dogmas, and readmit the reverence and wonder that no truly great scientist has ever lacked. The Social Sciences are mostly modern pseudo-disciplines, but their study of the Microcosm could be transfigured if they granted Man a soul and Humanity a spritual destiny. And as for the Humanities, these stand guard over the treasures of archeology, language, philosophy, religion, and all the arts.

The Four Directions of the Magical Worldview.





Gnosis
Jay Kinney, Editor
$15/2 years
(4 issues) from:
Gnosis Magazine
P. O. Box 14217
San Francisco, CA 94114

Fireworks: *Beyond the Spectator Sport*

by Peter J. Sabatini, Jr.

I AM LICENSED by the State of California as a pyrotechnic operator. In California and other states, a licensed pyrotechnic operator must be in charge of any and all fireworks displays, such as those viewed by the public in parks (or wherever) on the Fourth of July.

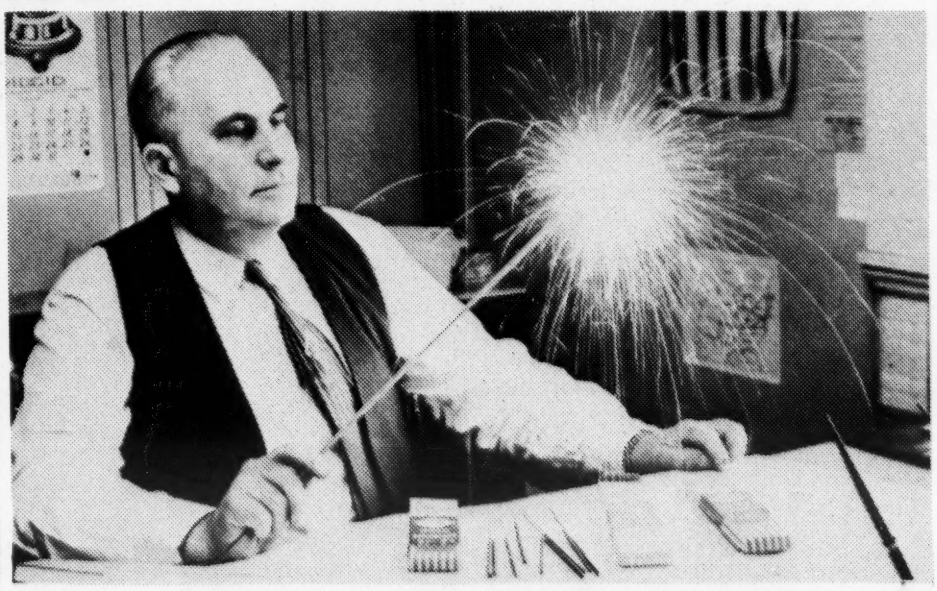
In order to become licensed in California, I had to have two years' experience working on fireworks shows under the guidance of a licensed operator. In addition, I needed five letters of recommendation from five licensed pyrotechnic operators. Then I had to pass a written examination administered by the state fire marshal that tests knowledge of laws and regulations pertaining to storage, handling, and use of pyrotechnics.

Many pyrotechnic operators work only one day out of the year — on July 4th. Not many people make a living shooting fireworks. Most do it because for them fireworks are a hobby or passion. Fireworks for me are fascinating and magical. While pursuing this interest in my adolescence, I discovered others who felt the same way. Some of them went on to establish publications and organizations dealing with various facets of pyrotechnics.

Though there is much I could say about fireworks, I would rather provide resources for others who wish to explore the subject further.

Books are available that provide essential information about the various aspects of pyrotechnics, including hobbyist manufacture (rewarding but dangerous). There are companies that sell the components necessary for such activities. Access to this information is available through the resources cited here.

(Below left) Japanese fireworks expert Toshio Ogatsu launches a shell near San Francisco in 1957. (Below right) Walter Beachler of United Fireworks Company, Dayton, Ohio, in the 1950s, with one of his parade sparklers. All photos on this page are from *Pyrotechnica*, reviewed on page 124.



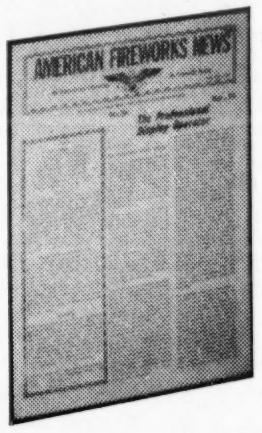
Another Fourth of July has come and gone. But if you're like me and have found it difficult to get the gunpowder out of your bloodstream, check out this insider's survey by Peter Sabatini. You just might be a latent pyrotechnician.
—Ted Schultz

American Fireworks News

A publication reviewed way back in ***The Updated Last Whole Earth Catalog*** *(1974),* ***American Pyrotechnist Fireworks News****, has gone through several transformations. The editor died a couple of years ago, but even before that, the editorship and the name changed. Now it's called* ***American Fireworks News****. It is a monthly newsletter of general interest for all fireworks enthusiasts that publishes how-to articles, pictorial visits to fireworks plants, club news, technical reports, etc.*

Also from the same editor, John Drewes, is the ***Fireworks Buyer's Guide & Trade Directory****, a complete listing of all domestic fireworks manufacturers, importers, and distributors that is updated every October. It lists companies, addresses and phone numbers, chief officers, and types of operations, as well as independent shooters, professional associations, and suppliers of goods.* —PS

American Fireworks News
John M. Drewes, Editor
$13.50/year
(12 issues)



Fireworks Buyers' Guide & Trade Directory
John M. Drewes, Editor
1986; 106 pp.
$15
postpaid from:
American Fireworks News
S. R. Box 30
Dingman's Ferry, PA 18328

•

THE CROSSETTE

A crossette star is a large pumped star made of one or another type of streamer composition. It has a cavity in one end that penetrates rather deeply. It is wrapped in protective paper so that it burns progressively from one end. The overall effect of a crossette shell is to see a number of these tailed stars spreading from the break, and then they abruptly burst into fragments. The fragments themselves become tailed stars and the aim is for the fragments to burst evenly, in a cross shape. Thus the name "crossette."

Pyrotechnics Guild International Inc.

Pyrotechnics Guild International Inc.
Bob Winokur, Editor
$18/year
(12 issues) from:
Fred Lienhard
895 Daniel Drive
Reno, NV 89509

There is also the ***Pyrotechnics Guild International, Inc.*** *(PGII), an independent worldwide nonprofit organization of amateur and professional fireworks enthusiasts. Its objectives are to: 1. Promote the safe and sane display and use of pyrotechnics. 2. Encourage the display of public and private pyrotechnics in conjunction with local and national holidays and patriotic events. 3. Promote the production and sale of high quality pyrotechnics. 4. Channel the creative energies of talented people into the design, production, and display of high quality pyrotechnics by example of the membership and through the sharing of knowledge.*

The PGII publishes a bulletin that members receive at least four times a year. The PGII also sponsors a convention every year where hundreds of fireworks enthusiasts gather from around the U.S. and the world. These individuals spend a week in pyrotechnic heaven with workshops, trading, buying, and especially shooting fireworks. —PS

•

John Buttino showed me the original design layouts (written on 70 pound kraft shell paper of course), of the final show to be fired in Ithaca in 1961. This was comprised of 30 set-pieces, many with color changes and intricate motion built in. Nothing was powered by hand or motors — "It goes by fireworks or it doesn't go at all." Patsy would exclaim. One of the more intricate pieces was a giant fan which opened into a 5-pointed star midway through its burn. There was also a 100 foot long "Niagra Falls" and the fiery "devil chasers" that would zip back and forth between the 120 yard length of the football field. There were approximately 100 display shells in addition to the grand finale. So large was the display that what I had assumed was the main shell battery on John's layout was in fact the finale. I counted 16 racks of 15 mortars each, some as large as 6". Half of the finale were reports. "Actually," John said, "the salute racks are a little deceiving. Some of the 4" reports were clusters of 12 salutes per bomb, the 5" bombs contained about 20 salutes. We would build up the salute barrage steadily and end with a single 6" salute." I remarked that the cost for such a show must have set back the Ithaca July Fourth Committee quite a bit. "About $1500," John remarked, "we worked for free, that way our father was able to hold down the costs."

•

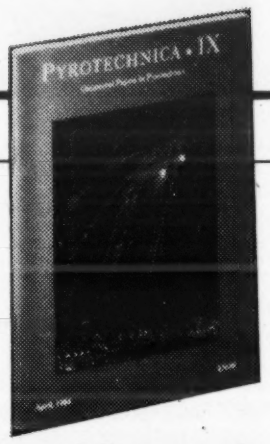
SOME FORMULATIONS FROM FRED CRICHTON

Red, for stars	Parts by weight	Approx. %
Strontium nitrate	5	58.8
Potassium perchlorate	2	23.5
Shellac	1	11.7
Parlon	0.5	5.8

Dampen the finely ground composition with 50/50 alcohol water. When dry, the stars burn with a very luminous, saturated red flame. The stars are easily ignited, somewhat crumbly, and slow burning — ideally, they should be 3/8" cubes.

Bernie Rissel and some of the shells used by the Ohio Hot Shots in the public display. Note the long multiple break shells and the giant 16 and 12 inch shells. —PGII

Pyrotechnica



Pyrotechnica
Robert G. Cardwell, Editor
$20/issue
from:
Pyrotechnica Publications
2302 Tower Drive
Austin, TX 78703

For those interested in more sophisticated treatment, there is ***Pyrotechnica: Occasional Papers In Pyrotechnics****, "An irregularly appearing serial dedicated specifically to the fireworks art, craft and science." So far, ten issues have been published since its inception in October 1977. Past issues have boasted articles such as "The Physics, Chemistry and Perception of Colored Flames" and "Studies on Blue and Purple Flame Compositions Made With Potassium Perchlorate." Articles in the current issue include "A Brief Historical Sketch Of The Development Of Pyrotechnics In Russia" and "Determination Of Height Of An Explosion In Air." The design and layout of* ***Pyrotechnica*** *are first class, and so is the price. The current issue is $20. —PS*

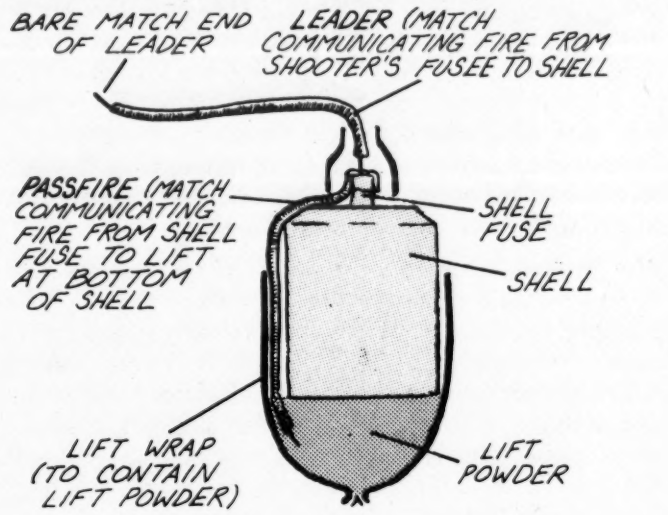


Figure 3. Parts of a shell.

Fireworks

Well-known writer George Plimpton is a fireworks aficionado. His book ***Fireworks*** *covers some of what I have discussed and does it all in a personal and very humorous vein. The book is a beautifully produced tribute to the pyrotechnician's art and an excellent introduction to the field. —PS*

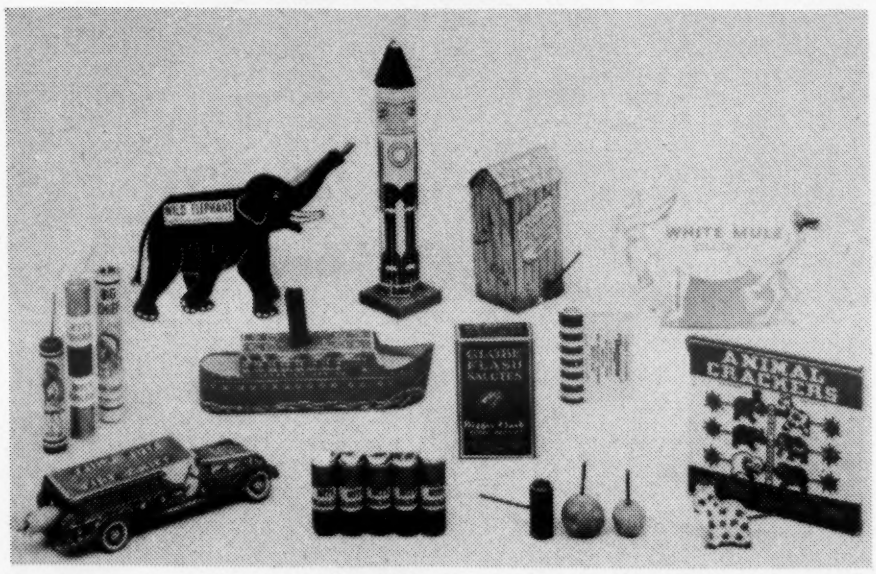
•

Nobody is quite sure on what occasion the greatest pyrotechnics display ever fired was given. The Brocks fireworks family in England has always singled out the enormous extravaganza of July 19, 1919, put on to celebrate the signing of the Treaty of Versailles; they say it's the largest show ever fired, at least by their company. Certainly the prints and engravings of the time — showing the entire length of Hyde Park alive with rocketry and aerial bombs, including hundreds of curlicue serpent shells — would seem to support their claim. The finale alone had an effect with two thousand rockets in the air at the same instant!

•

The Ogatsu family has been a particularly influential fixture in international fireworks circles since the end of World War II. Toshio Ogatsu, heading a company 250 years old (his eleventh forefather provided fireworks for the feudal lords in the eighteenth century), came to the United States just after the war to offer his products and expertise. He created quite a stir. First of all, he referred to himself as an "artist" — a startling nomenclature for the average American pyrotechnist to hear — and he took pains to show them how he was inspired by the aesthetics of waterfalls, flights of birds, and the movement of fish in an aquarium (one of his aerial extravaganzas was called "Tropical Pool").

This random selection from Orville Carlisle's fireworks museum in Norfolk, Nebraska, illustrates the variety and range of fireworks devices.



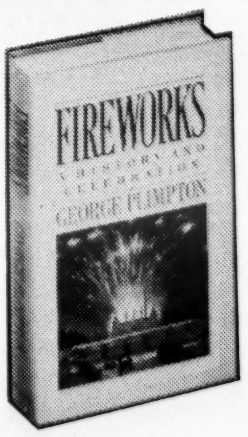
First he painted his concepts on canvas, and then with meticulous care tried to emulate his designs in the night sky. All of this was relatively new to American pyrotechnists. His reputation and the beauty of the Japanese shells he brought with him made a considerable impact, as they did elsewhere. Ogatsu became world-known, and highly praised except, perhaps, in the Soviet Union, where he made the mistake of concluding a show on the Moscow River with a huge fiery replica of Mount Fuji. It completely dwarfed the penultimate display, which had been a rather tacky representation of the Kremlin towers. Ogatsu was not asked back. "Insensitive," he said tartly of the Russians.

•

In one of the most startling aerial segments, the shell bursts literally spelled out characters and letters in the sky. I had always heard about "letter shells," but had never quite believed they could do such things. I had been told that during the Algerian crisis Ruggieri had been approached by Arab nationalists who wanted to learn the shell-making trade so they could spell out anti-French slogans in the skies over Paris. Ruggieri said it couldn't be done. When people spoke of remembering letters in the sky from fireworks shows they had seen in the past, what they were usually recalling were set pieces spelling out product names or messages such as "good night."

But there they were! Apparently Ruggieri could have done it had he wished! Shells high in the sky burst out in the calligraphic designs of Japanese characters, and along the line on the porch heads nodded and people leaned to each other and spoke the names which they had read *off the sky*. We were told the names were of leaders in the religious order. I could not get over it!

Fireworks
George Plimpton
1984; 288 pp.
$25
postpaid from:
Doubleday and Company
Direct Mail Order
501 Franklin Avenue
Garden City, NJ 11530
or Whole Earth Access

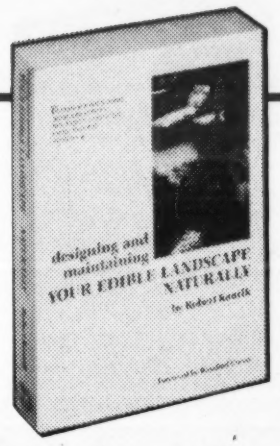


Edible Landscaping

The idea of evaluating a plant both for its looks and its nutritional value was presented in Rosalind Creasy's ***Complete Book of Edible Landscaping*** *(**CQ** #34, p. 57). Her main goal was to change the boringly predictable grass lawns of suburbia into attractive, food-producing gardens. In other words — don't mow it, eat it!*

Now Robert Kourik has gone a step further, giving the experienced gardener more information on how to combine a farmer's practicality with a landscape designer's perspective. A wide variety of plants and trees that both beautify and nourish are listed, many of them relatively unknown. In addition, Kourik, formerly head gardener at the Farallones Institute and never one to respect hoary garden lore, throws in his own considerable wisdoms, which are guaranteed to be thought provoking.

The book is engrossing reading for any serious gardener, especially for those of us with the veggies-are-to-eat, flowers-are-to-look-at syndrome. Edible landscaping looks like the best idea to hit grassroots horticulture since the concept of organic gardening went mainstream, and it could have as wide an impact. Read the book and see for yourself. You'll probably end up like I did, out in the garden with new ideas and inspiration. —Dick Fugett



Designing and Maintaining Your Edible Landscape Naturally
Robert Kourik
1986; 400 pp.
$16.95
($18.95 postpaid) from:
The Edible Landscape Book Project
P. O. Box 1841
Santa Rosa, CA 95402
or Whole Earth Access

Ornamental kale is as tasty as the better-known green variety, and it adds a colorful highlight to a winter landscape.

•

There is another way to ensure the strength of an open center tree: using a support that gets stronger with age. Two young limbs tied together across the middle of the tree can form a living guy wire. In Europe, the method is called *pleaching*.

During midsummer, take two supple sprouts from opposite branches and twist them together. Scoring the bark on each sprout and matching the wounds will speed their union. Tie the twisted branches together near their terminal buds. After several seasons, the sprouts will grow together as if grafted. Once they have, remove the tie. Pleached branches get stronger with age.

•

Some common garden plants are allelopathic. Sunflowers and potatoes are said to stunt each other's growth. In fact, sunflowers (*Helianthus annuus*) produce chemicals that act as growth inhibitors to a number of plants, not just potatoes. We also know that there is a difference in allelopathic effect from one variety of sunflower to another. However, no study has been done of the influence of sunflowers on crop plants. Another example is the black walnut (*Juglans nigra*). It stunts, or even kills, tomatoes, blackberry, alfalfa, asparagus, chrysanthemum, dock, potatoes, cereal grains, pine trees, and apple trees. Yet Russian olive shrubs, black raspberries, ferns, goldenrod, asters, mints, violets, wild grape, clovers, buckwheat, peach trees, plum trees, and Kentucky bluegrass grow fairly well beneath or near black walnut trees.

•

I think favas are the best steamed beans there are — they are "meatier" and more succulent than the best peas. I usually make an entire meal of this dish. The shucking is tedious, so I do it while watching a *M*A*S*H* re-run.

Wonder Crops

The Natural Food Institute is an interesting outfit that has put together a listing of extra-hardy plants, those that have more than average resistance to such adversities as insects, disease, temperature extremes, and drought. Crops as familiar as tomatoes and grapes combine with unlikely items like salal, lingonberry, and Siberian pea shrub in a catalog that's guaranteed to tweak any gardener's curiosity.

The NFI puts out the catalog but doesn't do any of the selling. Each crop is listed along with the nursery that carries it and the price, leaving you to order from the seller. NFI lists growers free of charge, in case you're marketing an unusual variety.

I haven't ordered from this catalog yet. If you have, let me know about accuracy of description and service. It's a good idea with potential. —Dick Fugett

•

Grain Amaranth (*Amaranthus Cruentus*) 85 days
Edible leaves. Purple seedheads. Seed originated in Mexican highlands. Grows at high elevation, on hillsides, and hilltops. Produces on marginal land. Suppresses weeds. Weakest point: strong smell when stored. Self-sowing if allowed. Does not "lodge" (blow over in wind). High lysine and methionine content. Harvest after frost. Plant mid-June. Soil temperature must be 55-60° to germinate. Resistant to most insects and diseases. No spraying required. Annual yield: 300-600 lbs/acre. Waste can feed cattle, hogs, chickens. High in iron.
★ NEW WAVES — $3/oz (several hundred seeds). Postpaid. Organically grown.

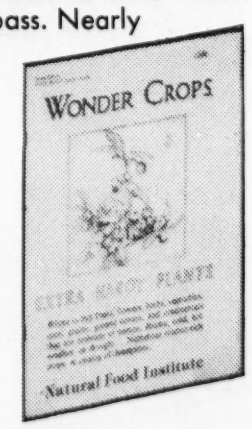
•

Cherry-Plums
The result of a cross between sand cherries and plums. Cherry-plums have a shorter lifespan than their plum-cherry parents. Drought resistant. Also resistant to late Spring frosts. For pollination, plant 2 different varieties no more than 4-8' apart.

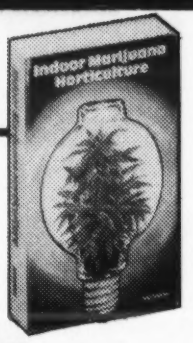
Compass Minnesota, 1896
Ripens in late Aug. Extremely hardy. Withstands -50° or colder.
★ JUNG — 7.95, 2/7.45; ST LAWRENCE — 8.50

Sapalta Alberta, early 1900s
Ripens about the same time as Compass. Nearly freestone. Hardy to -50° or colder.
★ ST LAWRENCE — 8.50

Wonder Crops
Catalog
$5 from:
Natural Food Institute
Box 185 WMB
Dudley, MA 01570



Indoor Marijuana Horticulture



Smoking and then growing marijuana introduced a generation of Americans to gardening. There is still only one state (Alaska) where it is legal to grow and possess marijuana for personal consumption. Between drug law enforcement and the neighbor kid down the block, growers today are becoming experts at high-tech indoor cultivation. High-intensity discharge lights, hydroponic cultivation, and even computer-controlled indoor environments are all available. ***Indoor Marijuana Horticulture*** *is the best introduction to the wonderful world of electricity that makes total indoor growing possible — fans, lights, timers, moisture meters, and CO_2 enrichment systems.*

—Richard Nilsen

•

Technological breakthroughs and scientific research have shed bright light on indoor horticulture, by producing the *1000 watt metal halide and 1000 watt High Pressure (HP) sodium, High Intensity Discharge (HID) lamps.* Now, a reasonably priced artificial light source, providing the color spectrum and intensity necessary for marijuana growth, is on the market. With the HID lamps, a gardener may totally control the indoor environment. The 1000 watt metal halide HID lamp provides sufficient intensity, of the proper colors in the spectrum, to grow incredibly potent marijuana.

Indoor Marijuana Horticulture
Jorge Cervantes
1984; 288 pp.
$12.95
($13.95 postpaid) from:

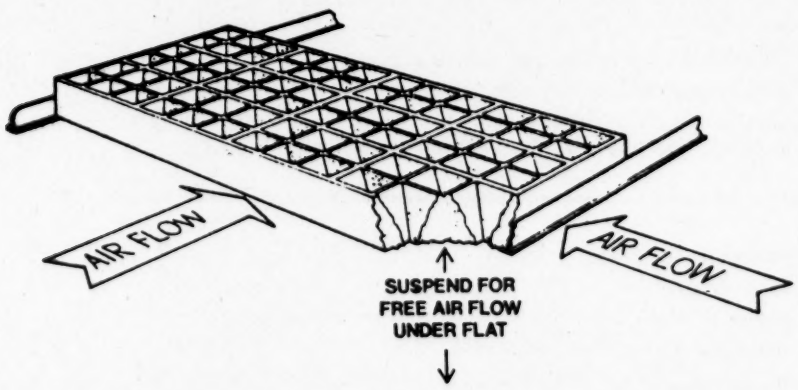
Interport USA Inc.
P. O. Box 02443
Portland, OR 97202
or Whole Earth Access

The clone on the left received intense light, while her sister (right) grew up in a distant corner.

Peaceful Valley Farm Supply

If for some absurd reason I had to do all my agricultural shopping with just one catalog, Peaceful Valley Farm Supply would be the one. With it I could buy a BSC Italian roto-tiller, Speedling Transplant Flats, or beneficial insects for pest control. Or Fawn fescue grass seed (by the pound or the sack), earthworm castings, or a bristlecone pine tree. More than 475 varieties of plants are for sale in the current catalog, including the Floyd Zaiger line of genetically dwarfing fruit and nut trees. The emphasis is on ecologically sound products and the service is friendly.

—Richard Nilsen



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Speedling Transplant Starting Flats
By far our fastest selling container for growing transplants is the Speedling Flat, a unique reuseable polystyrene tray with individualized pyramid shaped cells which produces a stout plant which transplants with ease and without shock. Speedlings work incredibly well as they develop individual plants which have highly developed root systems when transplanted. Pyramid shaped plugs are easy to remove and transplant, with quick takeoff the rule rather than the exception. Many growers have used them for more than 30 uses and they are still going, making Speedlings the best value in transplant growing systems.

Peaceful Valley Farm Supply
Catalog **$2** from:

Peaceful Valley
Farm Supply
11173 Peaceful Valley Road
Nevada City, CA 95959

Gardening by Mail

Take one reference librarian with green thumbs, add one Kaypro computer and two years of work and — luckily for us — out comes this amazing book. More than 2,000 mail-order sources are ingeniously listed. Separate alphabetical lists of seed companies and nurseries are followed by a plant index, so if you are looking for, say, Siberian Iris, you can find all the sources that sell them under that heading. A geographical index provides travelling gardeners with a ready-made tour guide of the same sources. The same detailed attention is given to garden supply companies, societies, libraries, magazines, and even one hundred gardening books.

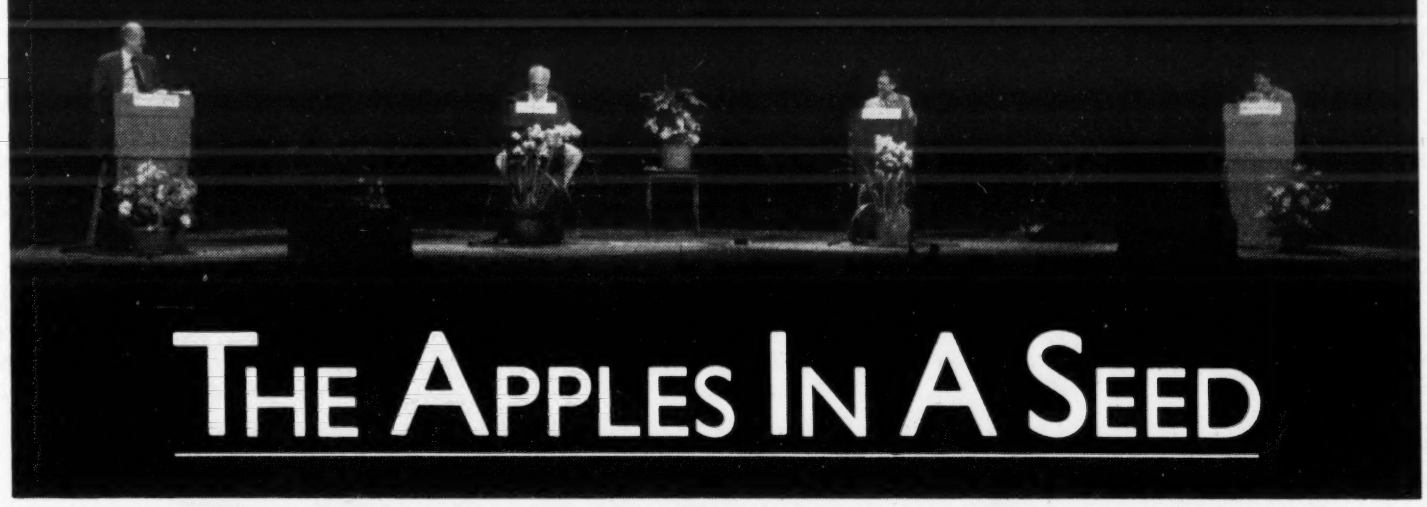
—Richard Nilsen

Gardening by Mail
Barbara S. Barton
1986; 255 pp.
$16
($18.50 postpaid) from:

Tusker Press
Order Department
P. O. Box 597004
San Francisco, CA 94159
or Whole Earth Access

I & SOCIETIES
Cyclamen Society c/o Dr. David V. Bent 9 Tudor Dr. Otford, Kent, England TN14 5QP (09592) 2322 Cyclamen Journal (2)
Cymbidium Society of America Mrs. Richard L. Johnston 6881 Wheeler Avenue Westminster, CA 92683 (714) 894-5421 The Orchid Advocate (6)
The Daffodil Society (UK) Ivor Fox 44 Wargrave Rd., Twyford Reading, Berks, England
The Delphinium Society Mrs. Shirley E. Bassett Takakkaw, Ice House Wood Oxted, Surrey, England RH8 9DW Delphinium Year Book
Desert Plant Society of Vancouver 2941 Parker Street Vancouver, BC, Canada V5K 2T9 (604) 255-0606

You Can't Count The Apples In A Seed



Kevin Kelly

Ten Years of CoEvolution Quarterly

On April 12 of this year, 1,500 people filled the Marin Civic Auditorium in San Rafael, California, "to jointly piss on the grave of the CoEvolution Quarterly," *as host/moderator Steward Brand put it. "We can do this with a certain amount of glee," he pointed out, "because the corpse has been born again in a book,* News That Stayed News *[see page 143], and in the form of a magazine called* Whole Earth Review." *On hand for the celebration were Ken Kesey (novelist and Merry Prankster), Gary Snyder (Pulitzer Prize-winning poet), and Paul Hawken (economist and author of* The Next Economy*), all familiar friends to* Whole Earth *readers. What followed was a lively interchange between the four panelists. Here's a portion of the onstage conversation.*

—Ted Schultz

KEN KESEY: One thing I want to talk about tonight is what I see as a growing fascism in the United States, and who we are and how we can combat it. A lot of people don't know what fascism is. They misuse the word and all they can think of is Mussolini and "kill the Jews." Fascism goes back to the old Roman word of *fasci*, which means sticks bound by a cord so they all work together. Usually it's big business, big church, and big governments. So when you see Reagan talking with Falwell about the labor movement, that, by its nature, is fascism. The real weapon against fascism is individualism and tribal cohesiveness and families and communities.

The fascist consciousness wants Baptists coast to coast, so when the Bhagwan is up there with his Rajneeshpuram, everybody is pissed at him; but I got up there and said, look, whether you're pissed at him or not, it's a healthy thing to have him there. As long as we can still have guys like the Bhagwan come and take over a town and create that much fuss up in Oregon, it says something about the openness of that culture. When we wipe out the Bhagwan and those guys, fascism will take over.

STEWARD BRAND: Paul, you're the apostle of individualism around here. What does the businessman do for civilization?

PAUL HAWKEN: Damn little, usually. He brings up the rear and charges for it. But I disagree with Ken. I see what's happening with the Congress and Reagan and big business as a sunset effect, of a generation that's leaving power, and also leaving the earth as well.

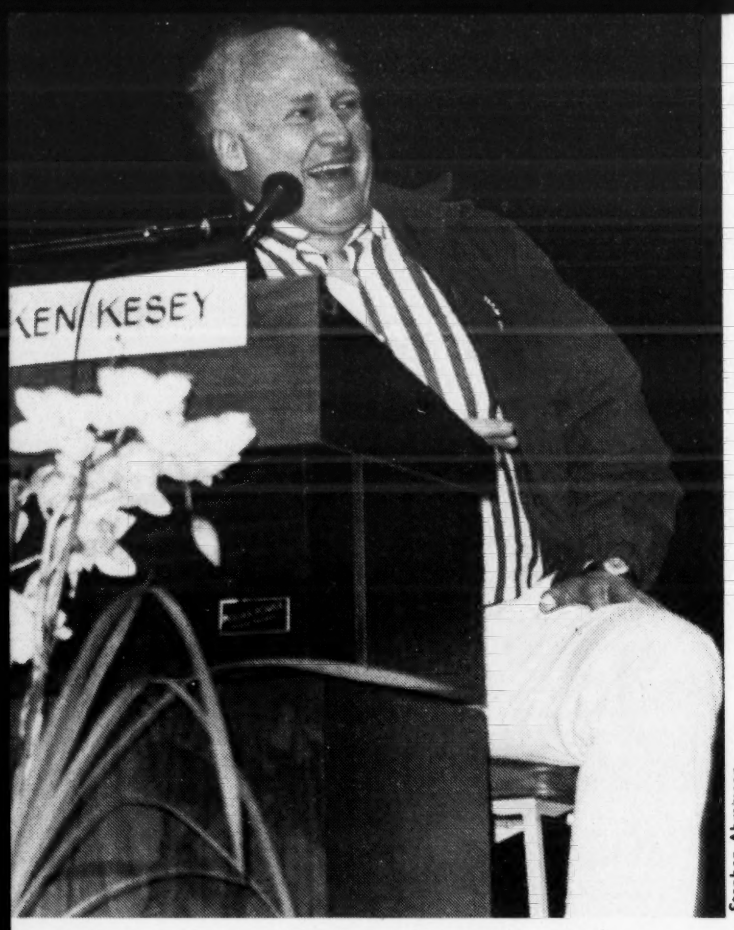
There's a lot of talk about the Boomers, the "b-word" you know, but we'll talk about them for a minute because there's eighty million of us. Most of those eighty million are nesting. They're buying homes. They're trying to figure out where they want to stay. They want to stop moving around. A lot of them are having kids, thinking about schools, school boards, jobs, about income, about a whole bunch of things. They've become real quiet. In that quietude we have this last stand, if you will, of a world view as typified by Ronald Reagan. It's a re-run, just like watching late-night television.

That's the politics that we have right now. It isn't nascent, it isn't something that's going to take over the country. It's not a trend where you can draw a straight line and say, oh my God, where are we going to be in five years? I think in five to ten years from now a whole 'nother generation will come to power that's going to be very, very different than these people who are fascists. And I agree with the definition, but I see them as disintegrating. I don't see them as having power in the true sense of the word, which is to implement reasoned intention. I haven't seen that kind of activity for six, seven years.

KK: I used to think that way, too. I thought we were going to change the world. I don't think so anymore. I don't even think we're going to change the United States anymore. Most people are just pretty much exactly like they were 20 years ago. Stewart and I are balder, but we pretty much think about the same things. We've learned a few things on how to keep from gettin' into trouble.

But I no longer think that we're going to win. I believe we are the losers. I believe that we're a very select group of losers and we have to understand that. I knew I wasn't going to be elected student body president. Or the most popular kid in college.

I wanted to be powerful. That was more important to me than influencing enormous numbers of people. I wanted to influence the correct



Stephen Abramson

Ken Kesey: "A lot of people say that when you die you just go back into the big puddle. Well, I ain't going for that. I know what I was promised in Sunday school, and I want it. And I'm not gonna rest until I get it. I'm going to build my own mythology, my own heaven, and try to get my people to go to it."

number of people. I think this correct number of people is getting smaller and more elite and tougher. But I don't expect all of a sudden to have the bad guys die off and a bunch of good ones take over, because they're training bad guys just as fast and harder than we're training the good guys.

PH: That's the problem with the 60s world view — that there's an *us* and a *them*. The problem was that it was too easy to be right in the 60s. It was so easy, with the war, with the environment, with the politics that existed at that time. I'm not talking about changing the world. All I said is that there's another group of leaders coming up, and I think they're different. Different is different. And the idea of taking what's out there right now and going, oh my God, it's going to hell in a handbasket, and throwing up your arms and saying we're a select bunch of losers, is self-reinforcing.

KK: I'm not throwing up my arms about it, but I'm not running around San Francisco trying to turn everybody else onto acid either.

PH: Well, 'cause it didn't work.

KK: It's because it'll never work. It's because there . . .

PH: So what are you trying now that's working?

KK: We're trying to get the marijuana law passed up there [in Oregon]. We slipped the bottle bill in on 'em, and they've been trying to get it out. If it came to a vote now, they'd vote it down, just like they're going to vote in handguns. Look how many people go to see *Rambo*. There's going to be more and more and more of those people and there's going to be a tougher and tougher little crew over here, just the way it's always been. There's always this little crew of ornery, mean son of a guns who are snapping at the big part of society and society's trying to kill 'em.

We won't win, but we will keep them from killing us. And when you don't think there's a *them* and an *us*, spend a few nights in the county jail. You'll find there's a *them* and an *us* and *they're* stronger than ever and just as mean as Attila the Hun.

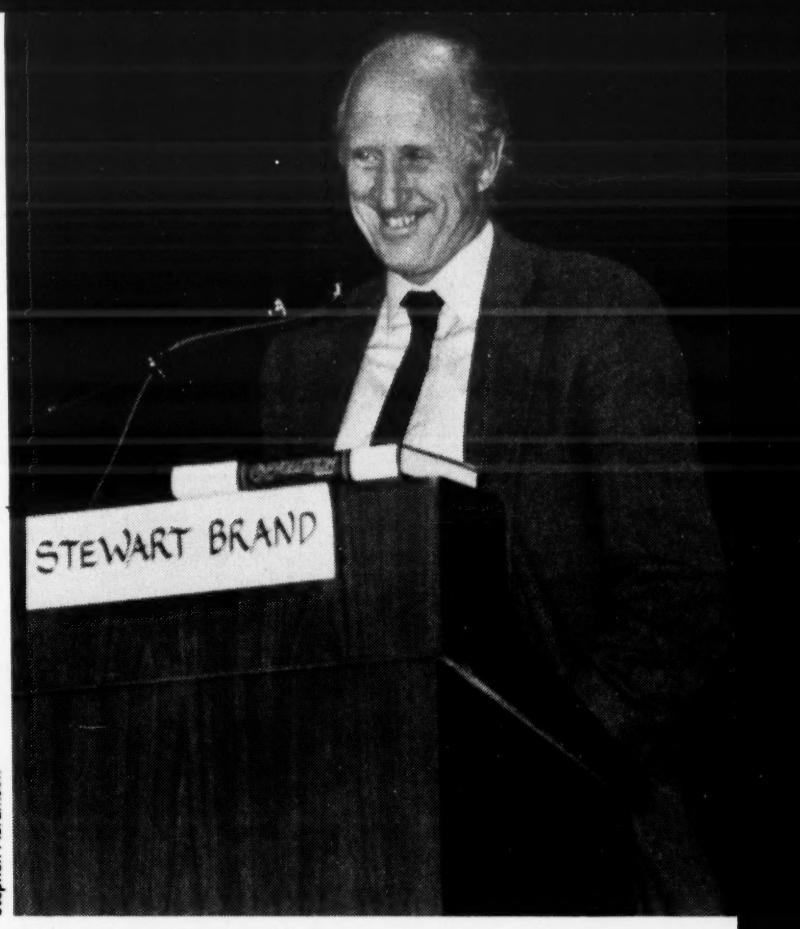
GARY SNYDER: Well, you know, I can go to the Mother's Day Scotch Broom Breakfast in the North San Juan Volunteer Fire Hall every year (it's called Scotch Broom Breakfast because the Scotch broom is all in bloom right then), and sit right next to the county sheriff and have a good chat with him and his deputy and he knows me by name and I know him by name. Every year. Been doin' it for seven or eight years now. You've probably been doing the same thing. It's been a lot of fun for me, discovering that what was really radical sometimes seems extraordinarily conservative.

Now I'll say something about environmentalism. Not a one of the world's current problems was caused by radical environmentalists — regardless of what anybody says in the newspapers. But one of the most radical programs of the anarchist branch of the ecology movement is the bioregional proposal that nobody should move — that they should all stay where they are and live there the rest of their lives. In other words, the idea is to become like a normal human being over the last 40,000 years and have a place. But when you do something like that, you wonder if you're on the far right or on the far left, because then what you're suggesting to people is that they go to school board meetings, and join the garden club, and take responsibility for what goes on in their community. And is that old or new? I don't know. But it sure does improve the quality of life.

KK: I was at an auction a few days ago up in Oregon. The loggers went into our oldest stand of trees in Oregon — a cathedral of trees that we have up there — some of the trees 900 years old. There's been a big court battle to preserve these trees for a long time. They went in on Easter and they cut those trees down, because there was a one-day lapse between the injunction and the thing that was coming up on Monday. They got 'em. They cut 'em down. And so we went to a big auction to raise money to kind of fight this, and there at this auction were maybe 150 people. And as I looked out there at those people, they're many of the same people that I know, and you can rely on them. And they are not the majority. They are in the very strong and reliable minority. They're the people like this guy Lloyd Marbett who is just one guy who has almost single-handedly kept nuclear power out of Oregon. If he'd left it up to the population of Oregon, we'd have had nuclear power plants on the Columbia on our side of the river. This one guy just kept at 'em and kept at 'em and kept filing injunctions and protesting and then he would get on top of one of the towers, and over the last ten years, this guy has made enemies out of everybody except the good guys, who know that he's out there, and that as long as old Lloyd Marbett is out there, he's more powerful than a thousand people, just by being there and doing it.

SB: I want to try on us a question that Kevin Kelly came up with. We might as well take the ten years that CoEvolution survived and look at

Stewart Brand: "We can't expect to win in a big or obvious or glamorous way, but we can expect to be like yeast in the bread, or like nitrogen-fixing bacteria in the soil. We're making a culture happen, and for the most part it will happen anonymously. And that's fine."



Stephen Abramson

ourselves and ask: what serious things have we changed our minds about? A question like that may take a little bit of thought, so I'll go first.

In a way it responds to something you said somewhere in the press, Kesey, which I appreciated. I guess this was probably in relation to Governor Brown, who I worked for part-time for a couple of years. You said, "Brand recognizes power and cleaves to it." And it's accurate. It still is. I go around finding people who do stuff and participate in some way — pick up a few things, sometimes leave off a few things.

So I've been around various kinds of leaders. And I've been drawn to, and I'm interested in how we're all drawn to, charismatic leaders — people who have such a sense of story going on that they're somehow driving forward, and the plot is this great, engrossing, interesting thing, and we get drawn into the plot as characters. And it's an enormous relief to be a character in a plot larger than oneself. It's not necessarily someone else's plot. It's just that you participate in something that's big and self-organizing.

Somebody usually assigns himself the job as the author of this plot that we're in together — running the state of California in an interesting new way, or doing something weird with a bus and seeing what that would do to the culture, or working with some people back at M.I.T. who are somewhat charismatically looking to change the nature of media. And I see some interesting problems that develop. I tried and tried to get a good reporter inside the Rajneesh situation to see what was being played out there. And none of us were close enough to Jim Jones to see what was being played out there. Some rather marvelous, quite Greek, tragedy seems to go on around charisma.

I've come to still be enormously attentive to and supportive of charismatic individuals, but a lot of the forms of the application of charisma strike me so that I get very wary, and I try to help other people be wary. And I say things like "Charisma is theft." The operation of charisma and the kind of situation where you're a character in somebody else's story — you lose something. And it may be real hard to find it again when you fall out of that story. I changed my mind on that one.

KK: The most profound thing that's happened to me, in all my life, was my son Jed's death, by far. And it really put all my spiritual beliefs to the test. You can throw the Ching on it, you can consult the New Testament. But when it comes right down to it, I got to talking about death and asking friends, what happens when you die? All of them kind of know this thing about this white light out there and you go toward the white light. We've all read that stuff.

And I say, well what else? I don't know. God takes care of that. Like the government. What if a government isn't going to take care of heaven for us? What if we've got to begin to build it from this side of the river — that you can't wait until you get over on the other side of the river to build your heaven?

Now you check back with the Egyptians or any of the Indians, even my grandma — you ask 'em, what's heaven look like? They've all got a pretty clear idea. You know, there's pearly gates up there, or if you're an Indian you go to the big rock there where the coyotes left three droppings, go west forty paces. Everybody had a pretty clear idea of where you went. And right now, you'll find that not many people are in agreement about where you go. A lot of people say you just go back into the big puddle. Well, I ain't goin' for that. I know what I was promised in Sunday school, and I want it. And I'm not gonna rest until I get it. And it's made me rethink a lot of tribal ritual and start thinking, not just in terms of community or family or civilization, but in terms of the tribe. And, in reading the Joseph Campbell book called *The Way of Animal Powers,* all through his literature he studies what people think and how they deal with their dead. Each little community, each area, had a different place you went to and they had a different idea. What I begin to think is maybe it's not really that important what it looks like — just that there is an agreement amongst the people in the tribe as to what's going to happen.

But without that kind of movement of your will past the barrier of your own life into the future, I think that we end up stuck in just the life part of our existence, instead of thinking "I am going to continue to live after my death," and putting some kind of will forward out there, which I think relates to the ecology. I believe it relates to how we want the world to continue after we are gone.

There's a lot of feeling in the young people — these are the 22-, 23-year-old people I know that, when you talk to them about what's in the future, about the only thing they're sure of is the bomb. They don't see the pearly gates yawning and opening for them. They see the bomb up there, waiting. For us to try to go on with that is going to be very difficult for a civilization, as we know it, to last — a large civilization. I believe it's going to come down to smaller and smaller communities

Stephen Abramson

Paul Hawken: "I see what's happening with the Congress, Reagan, and big business as a sunset effect of a generation that's leaving power and leaving the Earth as well. I think in five to ten years a whole new generation will come to power that's going to be very, very different."

that exist inside of this large civilization, like little funguses spreading up inside of a big fungus, and that gradually they'll get bigger and then maybe they'll get too large and cumbersome, like any big government, and other stuff will spring up inside of them.

As I travel around the world, I see people I really envy. I envy a lot of the Inuits and Upiks up north, because they still have a clear idea of a cosmology, of their own mythic cosmology, while our mythic cosmology goes back to Paul Revere and the Raiders and the Rolling Stones. That's about as big as it gets for us. And that just isn't enough, you know, to carry into the dark.

I really think that what one of the things that we're all involved in doing is to extend ourselves beyond our own lives. The building of this — I don't believe that we can expect the people that flocked to *Rambo* to do it. It's just not in 'em. Call it elite if you want, but I'm no longer gonna wait for 'em. I'm going to build my own mythology, my own heaven, and try to get my people to go to it.

GS: Well I don't know if I've changed my mind. I think I might have gotten a little more skillful. Certainly eliminated a few gross errors, reduced and almost entirely discarded any simple-minded notions of *us* and *them*. Discarded any notions of winning or losing, but finding myself on the same planet. It's not the New Age. It's the same old age. But it's as good as any age to be in.

I found myself not long ago testifying at a meeting on forest practices for the next fifty years in the Sierra Nevada, at the Supervisor's Chambers in Nevada County, saying, "The U.S. Forest Service is obligated by its mandating legislation to practice sustained yield. Sustained yield means that you will be maintaining a high quality forest with all of its wildlife and its basic watershed intact forever. However, what you are proposing to do will be good for perhaps no more than 250 years, and entry into the forest for clear-cutting on a cycle of once every 80 years is not sustained yield."

I said, "Look, we're going to be here at least a thousand years and we want to have a forest that we can continue to work with as the basis of our economy for at least a thousand years. That's a very conservative suggestion." A couple of the county supervisors looked at me with wide and surprised eyes and said, "What do you mean, we're going to be here a thousand years?"

And that is the problem, that there is a quality of the mind in this culture and in this country that cannot yet grasp the point that we are here. And it may be that we go on trips, to space colonies even. But we're also going to be here. And our children and our grandchildren and our great-grandchildren will be here, and that soil and those deer and those trees can be here for them, too. That is, for me, the pearly gates that I want to construct a path to, down the spirit road, and leave little piles of tobacco along the way for them to start out with at least, so they'll get there.

I don't care if that's in a supernatural or a natural world — it's all one to me. But to make that possibility — to make it just a possibility seems to me no more than a minimal human obligation. It's not a big political deal. It's not even a big spiritual deal. But it is part of the fun of being alive in your own time to sweep a little bit of the path for the little ones who need a little sense of where to go. And for some odd reason, we live in a culture that gives nobody a sense of where they might want to go.

So, I guess I am saying I am unashamedly on the same path I was twenty years ago, but I hope a little better.

PH: The mythology that, in a sense, undergirded my willingness to go into the world of commerce was a very simple one: it was a biological idiom. My feeling was that the soil could not change. I was brought up on a farm and I have seen what has happened, particularly to California. I'm a fifth-generation Californian and have seen the San Joaquin Valley sink 28 feet and become saline. I remember as a child in the Valley the cacophony of noise of frogs and crickets outside my screen window. You'd go outside and things would fly in your face. And now when I go to where my grandpa's farm was, it's stony silent. There's no sound at all except the semitractor trailers down the road, loading fruit at the cannery all night long.

So the purpose for starting the Erewhon natural food business was a very simple one, which is that I didn't think that most people intended to destroy the land, but it was happening. And my sense was that if there was a business — and not just one, because we created probably fifty different businesses while we were in business at Erewhon — that allowed people to make a choice that was informed, that was conscious, that was interesting, that wasn't laden with a lot of ideology, but full of richness and taste and texture and life itself, that slowly, one by one, families, and sometimes even communities, would make the interesting choice.

Gary Snyder: "There is a quality of mind in this culture and in this country that cannot yet grasp the point that we are here, and that our children and our grandchildren and our great-grandchildren will be here, and the soil and those deer and those trees can be here for them, too."

Stephen Abramson

For my boat across the river Styx, or whatever river we're going to cross, I'm not willing to say the boat is full. Or that that's about all there is and the rest of you have to stay behind. The mythology that I would like to see and that I act upon is a simple one. Again it's Buckminster Fuller, what he called "ephemeralization." We've learned to live on this planet by being egregiously and voraciously greedy and consuming at a rate that is unsustainable. My lifetime dream is how to teach people, how to inform them, how to assist them, how to nurture them, how to help them to be on this planet and to do what they want to do, to play, to work, to create, to write, to travel, to eat, and to share using less and less and less. It's a very slow process, but for me it's a very real process. And I think the one thing that I've totally changed my mind about is people themselves.

Growing up in the 60s, I *have* spent a lot of time in jail, and I know what it's like — the fear, the sweat, your own smell is abhorrent. And to be beaten. I know what that was like for me in Meridian and Bogalusa and Plaquemines Parish in Louisiana. There was a *them* out there, and that they were awful and that I hated *them*.

One of the things that happened to me when I wrote the book, *The Next Economy,* was something that I never thought would occur, which was that our corporations — *big ones*, the fascist ones that Ken refers to — started to invite me to come in and talk to them. I'd never stepped in there. But I started to talk. And I've probably spoken to maybe 100 of the Fortune 500 corporations in the last two years. And the thing that keeps bothering me is that I can't find *them* there very much.

And I want to find *them*. I looked for *them*. I probed for *them*. The place I found *them* definitely was at R.J. Reynolds. But very few other places were *they* there. And I am still confused about it. But when I saw people and I talked to them face to face, person to person, I couldn't help but come to the conclusion that most people are doing the best they can, most of the time.

SB: This ephemeralization that Paul's talking about says that we're moving from a mass economy — steel and grain and oil — to primarily an information or informative or intelligence economy. And the funny thing about intelligence is, when Gary reads you a poem, you've got it — you can take it home — but he's still got it, too. And this is not so true if he sells you some firewood. So it is a completely different economy. And someone said to me recently, there's a Nobel Prize waiting for the economist that figures out the economics of information, because it is different.

KK: When I say that we are losers, I don't mean that in any way but in a glorious way. When Ginsberg and I get together, we argue much this same argument. He wants to blame the government, and I say no, Allen, it's the poets' fault. It's never the government's fault. You can't expect the government to provide the vision for people to live by. It's always our fault.

When we start trying to say, "It's their fault, they won't let us do it," then we give over the only power that we have, which is the power to describe our vision and to try to get other people to join in on it. But we still ain't in the majority and we never will be.

PH: But you said yourself we don't need to be in the majority.

KK: But that's what I mean. We are the glorious losers.

SB: Being in the minority is not being a loser.

KK: I mean just that . . . I don't mean that we're losers in a bad sense. I mean that we just can't expect to win because we are right.

SB: Okay, so you can't expect to win in a big or an obvious or a glamorous way, but what you can expect to do is be like yeast in the bread. Or be like nitrogen-fixing bacteria in the soil.

KK: Or, as they say, you can count the seeds in an apple, but you can't count the apples in a seed.

SB: That's the work we're all doing in a way, it seems to me. We're making a culture happen and for the most part it will happen anonymously. And that's fine. So what you guys are saying is lose big, win small . . .

GS: Very Taoist.

PH: We're saying, fly under the radar.

KK: Fly under the radar is a good way to put it.

GS: What Stewart just said made me think of a quote from Tom Odum in *Environment, Power, and Society*. On energy flows, about the power of the word, except he wasn't necessarily talking about words. This is a biochemist energy-flow scholar and scientist from Florida who says, "In messages, the energy content as fuel is far too negligible to measure or consider compared to the great flows of energy in the food chain. Yet the quality of the energy in messages, tiny energies in the right form, is so high that in the right control circuit they may obtain huge amplifications and control vast power flows." ■

GOOD MOVIES

BLUE VELVET

by Sheila Benson

YOU CAN BET that David Lynch's **BLUE VELVET** will be 1986's *cause celebre.* It looks behind middle America's white picket fences and finds a seething cauldron of sexuality, venality, cruelty and utter corruption. It will probably be called blasphemy; it may also be called brilliant. And deeply, deeply disturbing. **Dune**'s Kyle MacLachlan is at the center of things, caught between budding innocence (Laura Dern) and dead-ripe sexual experience (Isabella Rossellini), with Dennis Hopper in between as the most frighteningly evil ordinary man you'd never want to meet. Its language, sexual intensity and violence, and nudity make **Blue Velvet**'s one of the hardest "R"s of the rating system, but for once it's quite correct. It's a shiveringly moral film that, once seen, will haunt your consciousness.

★ ★ ★

Next are two films where point of view is everything. If you can take the leap of a woman (Farrah Fawcett), twice attacked by the same would-be rapist (James Russo), who finally gets the upper hand and decides that killing her tormentor is the only possible way out, then **EXTREMITIES** may work for you. The key to her actions is Russo's chilling boast that, since the rapes weren't completed, if she has him arrested, he'll be out in no time — to come back and kill her. Director Robert M. Young applies the pressure inexorably, and he has gotten an unsparingly fine performance from Fawcett, tearstained and terrorized through most of the film, and a terrifying one from Russo, who played the role off-Broadway. Young's intention is heightened by the brilliant camerawork of Curtis Clark (**The Draughtsman's Contract**), whose rich afternoon-into-evening fading light carries us with it into Russo's dark-as-night mental state. The question that playwright/screenwriter William Mastrosimone leaves us with is: to just to what lengths can any of us be pushed? Diana Scarwid and Alfre Woodard play Fawcett's two stunned roommates and Woodard, in particular, is magnificent, suggesting with the fewest words an absolute tower of sense and of strength.

EXTREMITIES

★ ★ ★

'NIGHT, MOTHER

The second film is a ninety-minute battle: life against a dogged wish to die. It is, of course, Marsha Norman's Pulitzer prizewinner, **'NIGHT, MOTHER**, in which a mother (Anne Bancroft) and her adult daughter (Sissy Spacek) stage a no-holds-barred debate over the daughter's implacable wish to kill herself. The play's director, Tom Moore, has staged the film with a brilliant sense of pacing, and Spacek's performance is a revelation. How do you establish sympathy — or even empathy — with someone in relatively stable health, who, not finding life in any way rewarding, wishes simply to check out? (Deserted by her husband, with a son majoring in petty theft, she is also epileptic, although drugs have left her free of seizures for a year now.) Spacek somehow manages this almost impossible task in a performance completely without artifice: dry, bedrock, and ultimately shattering. Bancroft is another matter; she is playing for the back of the theater, and you imagine that in a theater this might be an effective performance. It throws the balance of the film off, but, because of the power of the material, it doesn't skew it fatally. One of the film's great values is that it forces us to marshal and consider our own feelings about life itself — its quality, its value, and rights over it.

★ ★ ★

ABOUT LAST NIGHT

You will probably not find a more acute, more hilarious pin-pointing of The Way Things Are romantically now than **ABOUT LAST NIGHT** (or the way they were, pre-AIDS). It ain't David Mamet and it's only shards of his coruscating one-act, "Sexual Perversity in Chicago," but 'twill serve. You can even overlook the bad and the beautiful Rob Lowe, who is at least trying, while Demi Moore, Elizabeth Perkins and Jim Belushi take over the screen, working out the permutations of love for the early-20s group. The complete surprise is how touching — and how universal — they can make it feel. Don't let this one get away from you under the misapprehension that it's brat-pack trash, and file in your memory the name of its first-feature director Edward Zwick and its writers, Tim Kazurinsky and Denise DeClue. ■

BACKSCATTER

Echoes from readers back
to the *Whole Earth Review*
(27 Gate Five Road,
Sausalito, California 94965)

Society of personality

Just after reading Marvin Minsky's "Society of Mind" (*WER* #51, p. 4) I read an article on a rare condition called Multiple Personality Disorder (MPD) ("Mind Menagerie," Judith Hooper and Dick Teresi, *Omni,* January 1986). MPD people have real societies in their minds. They use different personalities at different times, each personality largely unaware of the others. The various personalities have distinctive patterns of brain waves, cerebral blood flow, and hemispheric dominance and may have distinctive allergy patterns, menstrual periods, and prescription eyeglass needs. MPD is typically triggered by severe child abuse. Following Minsky's idea that one's personality is formed on a model the child constructs according to what he/she perceives his/her caretakers want him/her to be, I can imagine a severe attack by a caretaker as an emergency message: "My model must be seriously wrong." The child then creates a new model. But as Minsky says, you cannot eliminate old learning — a personality may be added, but it will not replace the old. Once a new personality is added, personality-adding is an established skill to be used again when crisis prompts; thus MPD people usually gain more personalities as they grow older.

Also following Minsky I read this in a news article on Elizabeth Kubler-Ross:

> She has made it her job for the last two decades to show dying people and their families how to take care of unfinished business.
>
> By this she means helping them to take responsibility for their own feelings and rid themselves of resentment, guilt, shame, hostility and other negative emotions. Now she thinks everybody must do this before the world can be at peace. (*Arkansas Gazette,* May 12, 1986, p. 1B.)

If both Kubler-Ross and Minsky are correct, the world will never be at peace. We could, according to Minsky, add on new feelings for peace, but we never "rid" ourselves of anything, especially "guilt" and "shame," which are attachment-learned in early childhood and lie at the very base of our social behavior. I think of the *CoEvolution* articles on the clay feet of Muktananda and Baker-Roshi a few years back — even "enlightenment" is a shell, beneath which old learnings and earlier minds lie intact, ready to be put to use in times of confusion.

John Hillbrand
Bass, Arkansas

Reply from The Farm

I feel like your choice of letters to print in "Backscatter about the Farm" (*WER* #51, p. 78) has allowed the discussion about The Farm to sink to a level of vicious character assassination. . . .

I suggest that you ask some of the people on your staff if I ever equated abortion with murder. This is particularly galling since, although I did provide women with an alternative to abortion, something I can't apologize for, I have also donated money to organizations founded on preserving women's right to legal abortion (NARAL and N.O.W.).

You can also find out if it's true that people who "hoed the fields, made the tofu," etc., never got to go anywhere. Right off the bat, I can think of Guatemala, Lesotho, Dominica, St. Vincent, St. Lucia, Jamaica and Sri Lanka where people were sent because they knew how to do that kind of work.

Masturbation and homosexuality not allowed on The Farm by my or Stephen's decree? I'm amazed you allowed yourselves to print that. . . .

I'll gladly admit that I used whatever influence I had to keep us from having as wild a sexual scene as the general run of baby boomers of the '70s enjoyed, if that's the right word. What we have to show for that is that hardly anyone contracted herpes. No one contracted AIDS while living on The Farm, and although we took in a lot of other people's troubled teenage kids, we had an extremely low teenage pregnancy rate. I'm still proud of that.

The claim was made that Stephen had veto power over financial decisions — an absolute myth, as many people could verify. As for his word being law, it sure wasn't when the people who planted the grass that first summer ignored his advice not to. If people had listened to him more, he would not have spent a year in the state penitentiary for something someone else did, nor would The Farm have borrowed money to buy things. He always advised against spending money we didn't have.

More than one woman took free, quality midwifery care on The Farm for granted. Some stayed for several births before complaining, and they didn't mind the midwives having cars when they were giving birth.

There have always been women involved in Farm administration. As for sexism and division of labor on The Farm, it needs to be said that middle Tennessee in the 1970s was not a high-paying area for women to work. The only women who were able to make enough money off The Farm for it to be worth the trouble and expense were nurses.

Lots of people seem not to know or to have forgotten that Stephen and I travelled more than most Farm members because of the books we wrote. People all around the country used to invite us to speak, and now and then we were invited, expenses paid, to other countries: New Zealand, Australia, England, Sweden, Germany, etc. Neither he nor I have made any money from the million or so of our books which were sold. That money went for general support for all the people on The Farm. The money brought in by our books continues to go to The Farm, not us.

Does anyone out there know of any other authors who not only get no money for what they did, but also have to absorb punishment from people who participated in their project and didn't like it?

Ina May Gaskin
The Farm
Summertown, Tennessee

Harry S. Robins

Political traffic

In response to Mark Sommer's assertion that "to my knowledge, no one has ever sought to take over city traffic and run it for personal advantage" ("Constructing Peace as a Whole

System," *WER* #51, p. 12), I must share the knowledge that traffic, alas, is far from innocent. Employment with the Florida Department of Transportation has opened my eyes to political battles fought every day regarding new road construction. Land along the final alignment is a prize; land values rise, developers build, and unless a city or local government is unusually stalwart and independent of influence by the local business community, zoning will fall into place causing "strip" development, business rows, and the ensuing traffic snarls. Face it — if you were a business wouldn't you rather be located in a spot where thousands of people pass by daily?

Frank Brown
Tallahassee, Florida

H.R.

Harry S. Robins

Well-traveled books

When we drove all the way across Canada, we took turns of reading aloud from *Zen and the Art of Motorcycle Maintenance*.

It wasn't a deliberate choice — somebody just happened to have it in their stuff — but it was just right, and it shed new light on all the minor personal hassles of travelling. Especially the times when we had to stop and tinker with the car.

Jake Williams
Aberdeenshire, Scotland

Allow me to turn you on to a book which is, in my opinion, the greatest packsack volume ever printed. This is one of the original hardcover editions; it has been reprinted in paperback at intervals since the '50s.

The Practical Cogitator (or The Thinker's Anthology), selected and edited by Charles P. Curtis, Jr., and Ferris Greenslet.

G. Mlazgar
Saskatoon, Saskatchewan, Canada

Michael McClure's *Ghost Tantras* pushed me into really seeing and singing Europe on my trip this summer. Grrrrrrrrrrrrr wop.

Eric Wagner
Tempe, Arizona

You don't even have to be country folks to enjoy these. Great for Spring-cleaning the head and also for travelling:

—*Malabar Farms*
—*Pleasant Valley*
—*Out of the Earth*

—all by Louis Bromfield.

Robert J. Donnay
Brussels, Belguim

The first precept of Buddhism

As a Buddhist, I am appalled by Robert Aitken's comments on abortion (*WER* #51, p. 63). Please let me correct the impression he left that Buddhism condones abortion. It does not. All the schools of Buddhism agree on certain fundamentals: that after death a being springs up again in the mother's womb; that the First Precept is to refrain from taking life; that killing a human being is one of the worst acts that can be performed; and that all intentional actions produce equivalent results for the doer.

Buddhism teaches that for an act of killing or harming to take place, there must be hatred or aversion present in the mind. Thus compassion and abortion are simply incompatible. We cannot simultaneously cherish a child and want it dead. Abortion is a planned killing, absolutely contrary to the highest principles of the compassionate Buddha. It cannot be neutralized by vile fantasies of "lovingly nurturing" the unfortunate infant while one kills it.

Can we excuse the act by mooning over the way "suffering pervades the whole universe" — having just *increased* that suffering? In such a case Mr. Aitken asserts that " . . . there is no blame . . . ." Indeed there is blame. Has he forgotten the Law of Karma? We may strive to banish the ugly memory, but the results of our deeds will surely catch up to us.

Most perverse of all is the Diamond Sangha's orgy of hypocrisy — its service for aborted babies. Can the mother and father stand by and piously invoke bodhisattvas and the Buddha, when they have just willfully killed their unborn child? Imagine the celebrants shedding their crocodile tears. A sorry picture! But no tears, no gush of euphemism, no sugar-coated selfishness, and no mouthing of scriptures can erase the deed itself.

The Lord Buddha made no allowances for killing. His teaching is always on the side of mercy, compassion, and restraint. Now and ever, we are responsible for our deeds. Killing and harming are always wrong. Mercy and kindness are always right. This is the timeless message of the Buddha.

Leonard Price
Washington, DC

The uterus as the world

Respecting the fetus as a human being would not mean we were no longer faced with the decision of whether or not to bring children into the world. It would only mean that we are recognizing the inside of the uterus as part of the world.

John Savard
Edmonton, Alberta
Canada

The fewer people, the better

Think how much more ethical & responsible other species are: trees, for instance (which take out little & put back much). In terms of the planet the best thing we could do would be *reduce* the number of humans & increase the beneficial species instead. In this context our concern with fetal rights is barking up the wrong tree.

My own thoughts on the consequences of treating the fetus as a human being are these: treating fetuses like human beings leads to more humans. More humans does not decrease our violence toward each other or increase our love & respect. These decrease in direct proportion to our feelings of being crowded, pressured & deprived by other people's needs. People become valuable as they become scarce, not more numerous — the same rule that makes gold more valuable than copper. How humiliating for the human ego . . .

Karen Jescavage-Bernard
Selden, NY

Pregnancy moratorium

What would be the consequences of treating pregnancy as something that can only happen every five years? How about a ten-year moratorium on having kids? How would *that* change the world we live in? Consider the amount of kids in the world compared to the amount of people with the time, money, ability and *desire* to care for them well. How many kids get what they deserve? If we said the rate of available parents to kids has always *got* to be what we know it requires — 3 to 4 adults per kid — isn't that more pro-life, more improvement on life standards on Earth, when the kids we got are cared for, listened to, *loved*, rather than adding one more life every time in five that people fuck (you're fertile 20% of the time)?

Paul Hoffman
Gainesville, Florida

Correction

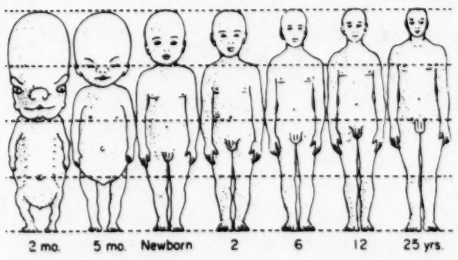
The first paragraph of my letter on treating fetuses as human beings (*WER* #51, p. 68) ended with two sentences:

> A human fetus is a human being because it cannot be anything else. It ought to be treated as a human being because a human being is what it is.

Your typesetter collapsed the two sentences into one, resulting in a statement that sounds somewhat short of intelligent.

Wendell Berry
Port Royal, Kentucky

We apologize for this error. Had the mistake produced a wholly unintelligible statement, we would have caught it.
—Kevin Kelly



Mandatory motherhood

On p. 64 of of the Summer issue [*WER* #51] you ask for contributions that explain the consequences of treating a fetus as a human being. As it happens, I dealt with this at some length in my book, *Mandatory Motherhood*, published in 1974.

It is not surprising that you don't know of it. In the 12 years since it was published it has sold only a little over 6,000 copies. The Beacon Press is very low key about its promotion (to put the matter mildly). The paperback copies are exhausted, and I don't know what the hardbacks cost. They are still in print, but you would be hard put to find a bookstore with a copy.

Here are the chapters that are relevant to your query:

> Chapters 13-14 (pages 50-59)
> Chapter 24 (pages 90-94).

I think those cover the logical points pretty thoroughly.

Garrett Hardin
Santa Barbara, California

*(*Mandatory Motherhood *is $8.95 postpaid from Beacon Press, 25 Beacon Street, Boston, MA 02108.)*

Eeek!

You never do know where a gem might show up. The other day I was perusing the third edition of *Roget's International Thesaurus*, and happened upon entry 459, animal sounds. With a few omissions, here's how it goes:

> cry, call; howl, yowl, yawl; wail, whine, pule; squeal, squall, scream, screech, screak, squeak; troat; roar; bellow, bell, blare, bawl; moo, low; bleat, blate, blat; bray; whinny, neigh, nicker; bay; bark; yelp, yap, yip, yawp; mew, mewl, meow; grunt, gruntle; snort, snork; growl, snarl, grumble, gnarl, yarr, snap; warble, sing, carol; pipe, whistle; trill, chirr, roll; twitter, tweet, twit; chatter, chitter; chirp, chirrup, cheep, peep, pip, yap; quack, honk; cronk, crunk; croak, chirk, plunk, caw; squawk; crow, cock-a-doodle; cackle, gaggle, guggle; cluck, clack, chuck, chuckle; gobble, gabble; hoot, hoo; coo; cuckoo.

And here's a passage from Dylan Thomas' *Under Milk Wood*:

> There's the clip clop of horses on the sunhoneyed cobbles of the humming streets, hammering of horseshoes, gobble quack and cackle, tomtwit twitter from the bird-bounced boughs, braying on Donkey Down. Bread is baking, pigs are grunting, chop goes the butcher, milk-churns bell, tills ring, sheep cough, dogs shout, saws sing. Oh, the Spring whinny and morning moo from the clog-dancing farms, the gulls' gab and rabble on the boat-bobbing sea and the cockles bubbling in the sand, scamper of sanderlings, curlew cry, crow caw, pigeon coo,

Harry S. Robins

> clock strike, bull bellow, and the ragged gabble of the bear-garden school as the women scratch and babble in Mrs Organ Morgan's general shop where everything is sold: custard, buckets, henna, rat-traps, shrimp-nets, sugar, stamps, confetti, paraffin, hatchets, whistles.

Paul Oppenheim
Portland, Maine

Don't plead guilty

I am a law student. I also know a number of people who have been arrested for petty criminal offenses. A conviction for any offense is a matter of public record and can foreclose many employment opportunities, so Carl Reddick's rule of thumb (*WER* #50, p. 70) about pleading guilty and seeing a friendly probation officer like Carl Reddick is extremely bad advice. Depending on underpaid and overworked public defenders who will have to deal with the judge many more times is also foolish. I know of a woman who is going to be jailed for first offense drunk driving. There was no accident, injury, or property damage. The public defender told her to throw herself on the mercy of the court.

Many courts have no mercy.

For minor offenses the ideal, but most expensive, route is to hire someone with political pull in the community. In one case I saw, the defense attorney was the brother-in-law of the prosecutor. Charges were dropped on a first-rate arrest with no procedural flaws. Criminal clinics at law schools, if they are willing to take the case, provide the best possible defense for someone with little funds. You will get from 10-100 times as

much labor from a pack of eager law students supervised by expert attorneys than from an expensive law firm that doesn't usually do that kind of thing or the kind of criminal defense attorney interested in taking routine cases. Any private attorney who is willing to both do legal research and ask old hands about the best procedure is better protection against a permanent stain on your record than a public defender.

Lawrence DeMott
Willimantic, Connecticut

Making commandments

A version of this was written as a first "assignment" in a seminar-workshop on world religions led by a poet friend, Steve Kowit, in San Diego. It seemed an excellent way to get folks to thinking about their guiding philosophies, relationship to the cosmos, etc.

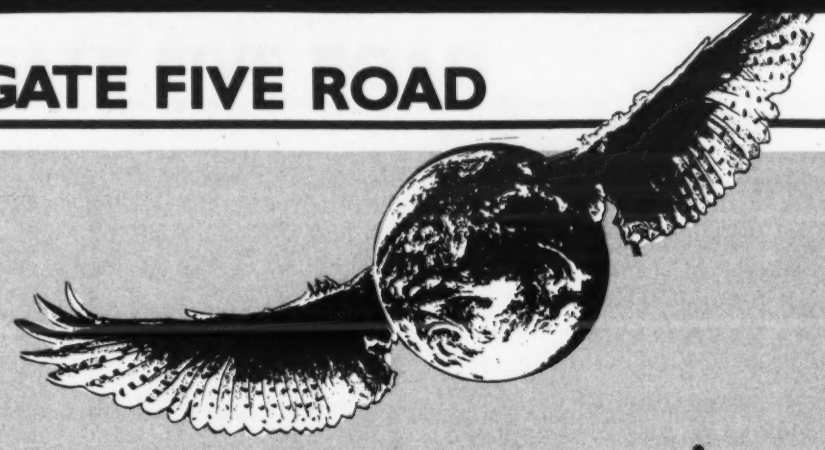
WER readers might like to play God, too. You should consider running some of their efforts (the most provocative? most poetic? most angry? most self-revealing? most concise?) in subsequent issues.

AN OCTOLOG
Commandments For Our Time

1. You shall not worship any thing or person or spirit, remembering that all are part of the One.
2. You shall strive to increase self-knowledge, thereby increasing your knowledge of all else.
3. You shall respect your environment as your life.
4. You shall accept being inescapably joined to humankind.
   Without the devotion of others, you would not exist.
   Cherish them; their fate is your fate.
   To believe that one can be free while any others remain prisoner is the most monumentally foolish of the Ego's many illusions.
5. You shall delight in small events — tree shadows
   the smell of baking bread
   a child telling herself a story—
   and regard large events serenely.
6. You shall look upon work as a privilege and a blessing.
7. You shall not take yourselves seriously.
   Any loss of Correct Demeanor shall be cause for gentle rejoicing among you.
8. You shall raise your children in these precepts.

Go now and begin a new life.

Don MacQueen
Santa Rosa, California



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Subscriptions to **Whole Earth Review** are $18 for one year (4 issues) and $33 for two years (8 issues). Foreign rates are $22 for one year and $41 for two years. Send your order with payment to: **Whole Earth Review**, P.O. Box 15187, Santa Ana, CA 92705.

Point/Whole Earth Consolidated Report April - June 1986

Income		Expenses			
Subscriptions & Renewals	$ 66,760	Salaries:		Mailing List Fulfillment	375
Back Issues	907	Editorial	$ 27,122	Software Catalog Fulfillment	59
Mailing List	9,381	Production	37,760	Syndicated Column	5,287
Software Catalog Sales	1,791	Circulation	5,563	Equipment Rent/Maintenance	4,732
Direct Distribution	13,352	Office	8,303	Telephone/Networks	5,260
National Newsstand	18,185	Research	13,673	Postage	1,954
Syndicated Column	8,620	Payroll Taxes/Benefits	6,210	Auto/Travel	202
Sales, *News That Stayed News*	1,647	Writers/Contributors	10,630	Promotion/Publicity	83
Contributions	2,289	Supplies/Research	5,710	Building Rent/Maintenance/	
Interest	900	Magazine Printing	29,819	Utilities	8,707
CompuServe	762	Subscription Promotion		Legal/Professional	3,291
Unclassifieds	2,138	and Fulfillment	14,974	Interest/Bank Charges	1,396
Miscellaneous	659	Direct Distribution	275	Miscellaneous	
		National Newsstand	1,589	Operating Expenses	998
Total Income	**127,391**			**Total Expenses**	**193,972**

Profit/Loss -66,581

Truth in labeling: the Financial Report deciphered

I suggested last report that things would probably get worse before they got better, and they did. This quarter's income statement shows how income has fallen and expenses have risen. The drop in income was expected and follows the usual summer doldrums in subscription purchases and renewals. The rise in expenses has been pushed up by the production of the ***Essential Whole Earth Catalog****.*

We've had a large, hardworking staff here for the last three months doing long hours, and it's only because magazine sales have been somewhat stronger than is usual for this time (with help from mailing list income, Unclassifieds and some nice contributions) that we have not yet had to take out a loan to tide us over until the final Doubleday payment for the new ***Catalog****. We do have a loan in the works, though, and we will almost certainly need it by the end of July. But as I write this, a very good response to the summer renewal letter has given the ol' checkbook new (though ephemeral) life. We're in the stretch for fall, when we hope you will all buy gift subscriptions for friends, relations, etc.*

The WELL, like a VW bus taking on more passengers, finds it harder and harder to climb the next hill. We need more users to reach break-even, yet the more users we take on, the slower the system runs as the computer huffs and puffs trying to serve everyone. To continue the bus analogy, when the vehicle slows down enough, people will want to get off and walk. So, we now have a population approaching 2,000 WELL users, most of them very loyal and thankful to have such a stimulating electronic gathering place, that will only grow as fast as our computer hardware purchases will allow. As you can see, our income/expense situation has not allowed us to make many of such purchases, but we are in search of a solution.

—Cliff Figallo, Comptroller

"Or Whole Earth Access"

That phrase under access information in the ***Whole Earth Review*** means you can mail-order the item from the Whole Earth Access store. Do not send orders for books to ***Whole Earth Review***. Send orders to:

Whole Earth Access
2990 Seventh Street
Berkeley, CA 94710
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800/845-2000

All orders are shipped UPS unless otherwise specified. $3 shipping-and-handling fee for up to five books, 50¢ each additional book.

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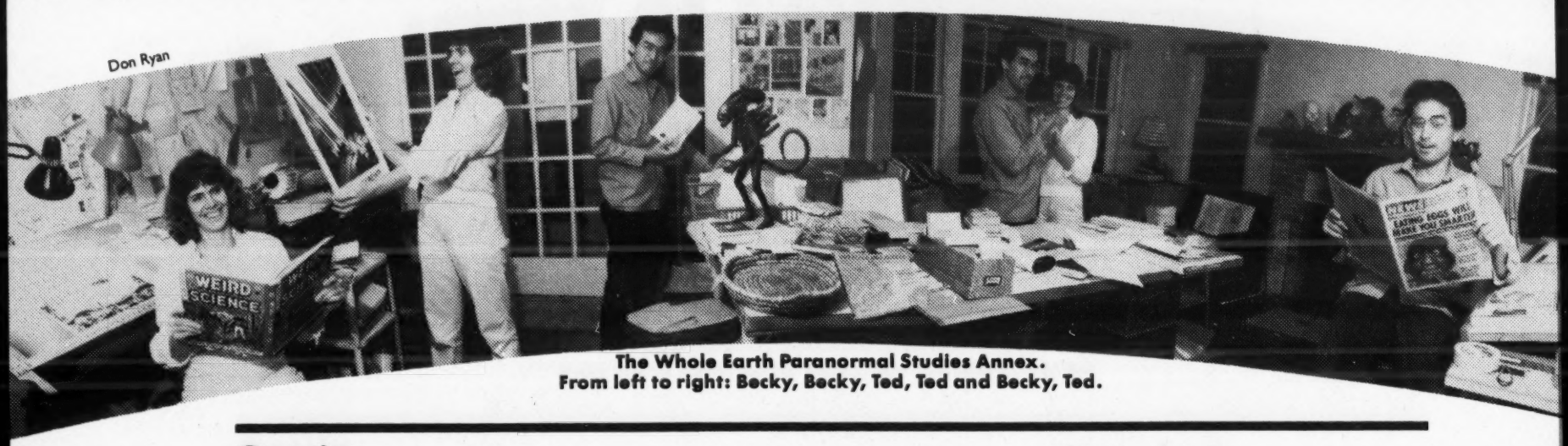
If you want your name left off mailing list rentals, please write and tell us.

The WELL, Inc.

Income			
Subscriptions, Online Fees	$ 41,767	Payroll Taxes	1,525
Other	100	General/Administrative	383
Total Income	**41,867**	Bad Debts	5,850
Expenses		Maintenance	245
Salaries & Fees	$ 20,388	Office	4,235
		Computer Expenses	14,391
		Sales Expenses	1,847
		Interest/Bank Charges	934
Total Expenses	**49,798**	**Profit/Loss**	**-7,931**



The Whole Earth Paranormal Studies Annex.
From left to right: Becky, Becky, Ted, Ted and Becky, Ted.

Gossip

It was a simple physics problem. Two events trying to happen at the same time had to happen in different places. The 416-page new ***Whole Earth Catalog*** *and another 144-page issue of* ***Whole Earth Review*** *couldn't both inhabit the same cramped working space. The several thousand books piling up for review in the* ***Catalog*** *nudging us gently, the half dozen new workers hired to do research elbowing each other discreetly, and the second typesetting terminal we installed to finish the* ***Catalog*** *all pushed the magazine out of its nest.*

It landed gracefully 50 miles north in Sebastopol, California, in guest editor Ted Schultz's house. He not only let the chore of producing a special issue of the magazine take over his life, he let it take over his home as well. Back at 27 Gate Five Road, the typesetting crew completed the text between pages of the ***Essential Catalog.*** *The galleys were ferried to and fro by Ted's neighbors Susan and Donald Ryan, who did this issue's usual production managing and photography. Up in Sebastopol, Ted's housemate Becky Wilson, formerly on the art crew of the* ***Whole Earth Software Review,*** *was designing pages of the magazine. Becky rounded up some local pasteup artists and set them to work in the living room on three used drawing boards. Ted worked in a back room among his collection of toys and robots and his priceless library of eccentric books. The main problem with this issue may be that it fails to convey the true DEPTH of strangeness that Ted has been collecting.*

Meanwhile the ***Catalog*** *lurches ahead. Our joy and safe haven from a relentless production schedule ("Six pages a day, or else," says Jeanne Carstensen,* ***Catalog*** *managing editor) is a game or two of volleyball, whipping up at about 2 o'clock on sunny days. Kathleen O'Neill's courtyard garden provides further respite. She has turned the patio outside into a flowery country club. A washtub lily pond is stocked with Yellow Snowflake waterlilies (available from Lilypons, reviewed WER #50, p.72) and 50-cent goldfish from the pet shop. Basketball-sized cabbages (back cover last issue) and potted exotic blossoms of a kind I've never seen before cheerily crowd the deck.*

Stewart Brand rented an extra room next door to lay out the research for his new book ***Inventing the Future*** *(about how publishing, video, and computers are melding to become a new medium). Monkishly dutiful in his austere writing room, Stewart quietly comes in once a day and sighs at the commotion. "What a relief not to be involved. I'm glad I'll be out of the country," Stewart says as the deadlines for the magazine and the* ***Catalog*** *collide. He'll be in London for three months setting up a conference for Royal Dutch Shell on managing large systems.*

Berkeley-based, listener-sponsored radio station KPFA offered a course in radio production that lured our distribution expert Cindy Craig. The course was capped with an opportunity to broadcast a five-minute show. Cindy's debut in radio was an investigative report on the politics of film distribution, using Haskel Wexler's movie ***Latino*** *(about Nicaragua) as an example. This has encouraged our plans to do a Whole Earth Radio Show, which Far-Ranging Factotum Dick Fugett is overseeing.*

Video Cassettes: Useful or Useless?

We're gearing up to investigate video cassettes, in particular those with do-it-yourself, how-to, or self-help themes, including homebuilding, fitness, education, etc. If you've had experience with such videos, good or bad, we'd like to hear from you. Send your comments and recommendations to Dick Fugett C/O **WER**, 27 Gate Five Road, Sausalito, CA 94965.

Whole Earth Preservation Society and Volleyball Reserves

There's more gossip to be told than can fit here, so Cindy Craig came up with the idea of a newsletter to keep friends of Point informed between issues of the magazine. It's called ***27 Gate Five Road****, looks like four xeroxed pages, and will be mailed to members of the Whole Earth Preservation Society and Volleyball Reserves, which we hereby inaugurate. Membership is $25 per year. We use that money (it's tax deductible for you) to further our research into issues that are ignored by normal ad-driven magazines. "Preserves," as members are called, will get* ***27 Gate Five Road*** *every quarter, halfway between scheduled issues. Expect more gossip, rumors of new projects, a look at the weird mail we get, sketches from James Donnelly's notebooks, a peek at our highbrow bathroom graffiti, staff rantings, a little more financial news, and whatever else will fit. "Preserves" will also have the privilege of being Volleyball Reservists during volleyball season. Show up and be ready to rotate in.*

The obvious intent of this Society is to raise funds for Point Foundation so we can continue to launch new projects and keep the magazine renewed. Equally important is our obligation to keep supporters abreast of Point's direction, more than we can do in our brief "Gossip" column every three months. It is also neighborhood news, put in an efficient tell-it-once format.

If you are presently a supporting subscriber, you will automatically become an honorary member for the duration of your supporting subscription. New Maniacal ($1,000), Sustaining ($100), and Retaining ($50) subscribers will also receive ***27 Gate Five Road*** *as members of the Whole Earth Preservation Society and Volleyball Reserves.* —*Kevin Kelly*

Thank You!

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How to submit things to

WHOLE EARTH Review

1. Send them. Address them to Whole Earth Review, Attention: Assistant Editor, 27 Gate Five Road, Sausalito, CA 94965, and drop them in the mail. We are sitting here, bored as anyone else, reading all the mail, hoping some of it will be good.

What's good? New, not read a hundred times before, not an imitation of old WER articles, often a personal passionate statement. Articles that sound like articles are often dead. Consider yourself to be writing a letter to an intelligent, uninformed friend about something that is interesting/important to you. We often print things that everyone, including the author, thought were too odd to be printed anywhere. Remember that we print all lengths from a paragraph to many pages, so don't puff a good, short idea into four tedious pages. And please don't try to please us by creating something you think we'll like. Being hustled is boring. We'd rather print true love — yours for your subject. All things are possible and may be printed. We have no editorial policy for or against any subject matter.

2. Enclose a stamped, self-addressed envelope. That's a courtesy. You are much better at writing your address than we — all that practice. If you don't address and stamp an envelope for us to reply or return things in, you're asking someone here to be your secretary. If we all did our own clerical work, there would be no secretaries.

If you are in another country, don't send foreign stamps. Go to your post office and buy an "International Response Coupon" and send it. We take the Coupon to our post office and redeem it for U.S. postage.

Submissions and reviews can be sent to us electronically on the following networks:

CompuServe: enter our online Whole Earth Conference by typing 'GO WEC' and leave a message.

The EIES network: go to conference 1031, the Whole Earth Software Conference, or message Kevin Kelly (400).

The WELL: our own regional network (Whole Earth 'Lectronic Link) can be reached by modem at 415/332-6106, or long distance along Uninet. Type 'go wes' and leave a message, or send e-mail to 'kk'.

3. Keep a copy. We are careful and good but not perfect. You should never send anyone the only copy of anything.

4. Be patient. We sometimes reply on submissions the day we get them, but you shouldn't get worried about no reply for about two months. Sometimes we have to show things to our far-flung, part-time editors, and that can take even longer. On the other hand, don't wait a year to tell us you sent something and didn't get an answer. Many manuscripts have flowed over the desk in that time, and it will be hard to remember what happened to yours or if we ever saw it.

5. Be legible and put your name and address on the first page of the manuscript. Those are all the rules of form we have. It's helpful to type if you have a typewriter (please double-space), but handwriting is fine if it's very neat. The name and address are so you don't become a mystery person if your envelope gets separated from your manuscript.

6. Avoid query letters. Query letters are what writer's magazines tell you to send editors to find out if they are interested in a subject. We're less interested in the subject than in what you do with it. If at all possible, please send us the manuscript.

Exception: You have found an interesting and complex subject that would take a lot of time and work to write about. If you want to know if we might be interested before proceeding, write a detailed, fact-filled letter about what you know and what you want to do, and send samples of your writing. The details and the samples might make it possible for us to make an intelligent reply. But in every case, it's better to send a manuscript than a query. (Please note: WER doesn't have a budget for "kill-fees," so all submissions are on spec.)

7. Notes on Reviews. Write to that smart ignorant friend, introduce the book or whatever and get out of the way. A paragraph should usually be enough. In book reviews, the quotes are the thing — ideally they should be immediately useful and contain the soul of the book. You don't have to type the quotes, just note page numbers. It's not necessary to analyze the book; just say exactly why you love it. It can take a long time to get a final decision from us on a book review. We don't decide about printing it until we've seen the book, which we order from the publisher, who may take a couple of months to send it. (Don't you send the book unless you don't want it back; it's hard enough to deal with returning manuscripts.) If we decide not to use your review, you won't hear further from us about it. If we do use it, you'll receive a check and tear sheet upon publication.

We like to review books of all ages, especially unheard of wonders that got lost in some shuffle.

8. Photographs for articles. The best by far for us to work with are black and white prints (either matte or glossy finish) that are 5x7 inches or 8x10. We can make do with 3x5. Never send your negatives unless we ask for them.

9. Money and Rights. We pay for everything we use upon publication. $15 for letters, $30 for photos, and $100 to $500 for articles. The article money varies depending on length, wonderfulness, and provision of illustrations. Item, book, and software reviews work like this — you get $20 for being the first to suggest an item and $20 for reviewing it. If you do both, you get $40.

WER buys first-use rights on material, though we reserve the option to reprint things in the Whole Earth Catalogs or our "Whole Earth" column. (If we reprint you'll receive another fee.) Contributors retain all other rights.

10. Will you still love us if we reject your offering? Editing is arbitrary. It's hard to explain why any given piece is rejected. To understand that, picture yourself leafing through a magazine, not liking an article, and suddenly being confronted by the author who wants you to explain why you didn't like the article. A cogent explanation would be somewhere between awkward and impossible and definitely time consuming. Our rejection notes tend to be short. It has to be that way if we're to have time to read all the mail carefully. If we turn down your piece, we may not convey in the note that we are grateful for all mail, that mail is all we've got, that the magazine would not exist if it weren't for mail from strangers who are good enough to share the wonders of their world with us.

We're waiting to hear from you.

—Anne Herbert
for the Whole Earth Review

P.S. Do not address your submissions to me. Send them to the Assistant Editor.

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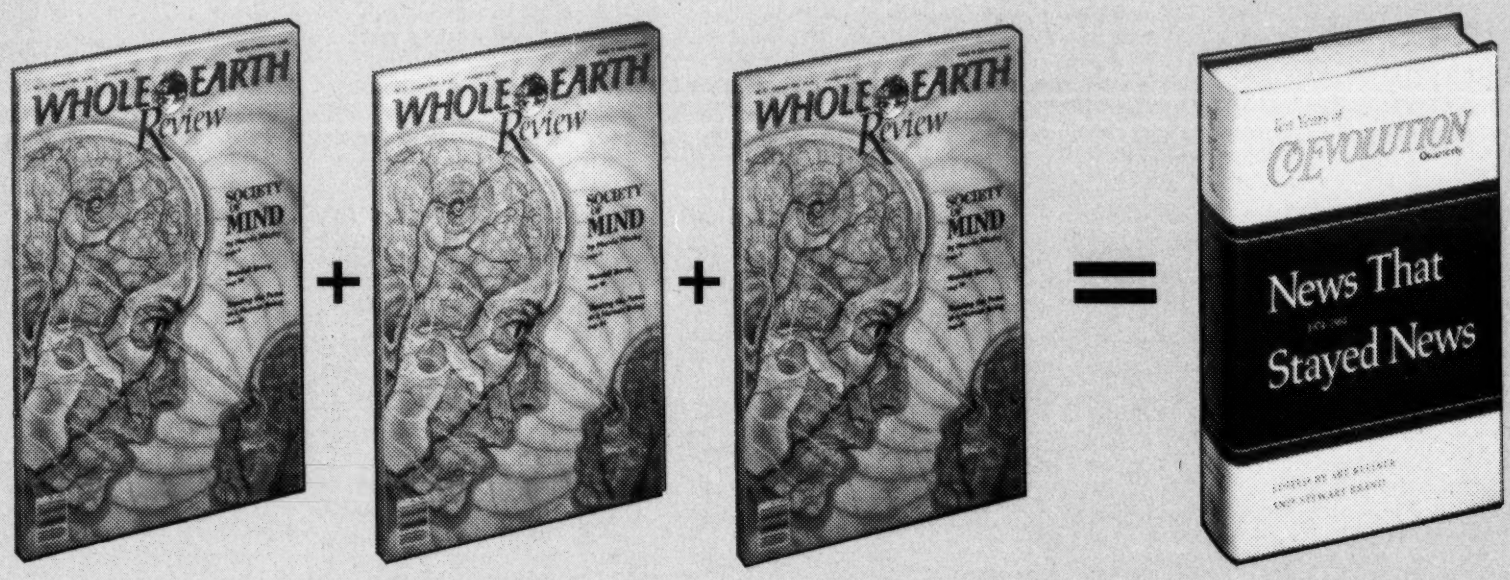

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CLIP HERE. MAIL IT RIGHT NOW.

EXPLAIN THIS!

BY NORMAN DOG

GO AHEAD...

LAUGH IF YOU LIKE, MR. SKEPTIC, BUT THERE ARE PLENTY OF THINGS IN THIS UNIVERSE YOUR PUNY SCIENCE CAN'T EXPLAIN!

DO TELL...

THIS EPISODE OF 'DICK CLARK'S NUTTY SCIENCE BLOOPERS' CLEARLY PROVES THAT BIGFOOT IS AN ALIEN FROM ATLANTIS WHO LIVED AMONG US AS 'HOWARD HUGHES'! NOW, EXPLAIN THAT!?

I KNOW FOR A FACT THAT'S A LOAD OF CRAP! I READ IT IN A MAGAZINE SOMEWHERE!

HAH! I KNEW YOU'D SAY THAT!

GEE... MAYBE THIS MEANS I HAVE HIDDEN PSYCHIC POWERS! WOW! EXPLAIN THAT!

THE ONLY PUZZLING PHENOMENON I'D LIKE EXPLAINED IS HOW I STAY MARRIED TO AN AIRHEAD LIKE YOU!

GO AHEAD! BRUTALIZE ANYTHING YOU CAN'T UNDERSTAND!

..YOU'RE JUST A TYPICAL CAPRICORN... CAN'T FACE COLD, HARD FACTS!

BOO HOO!

©1986 NORMAN DOG

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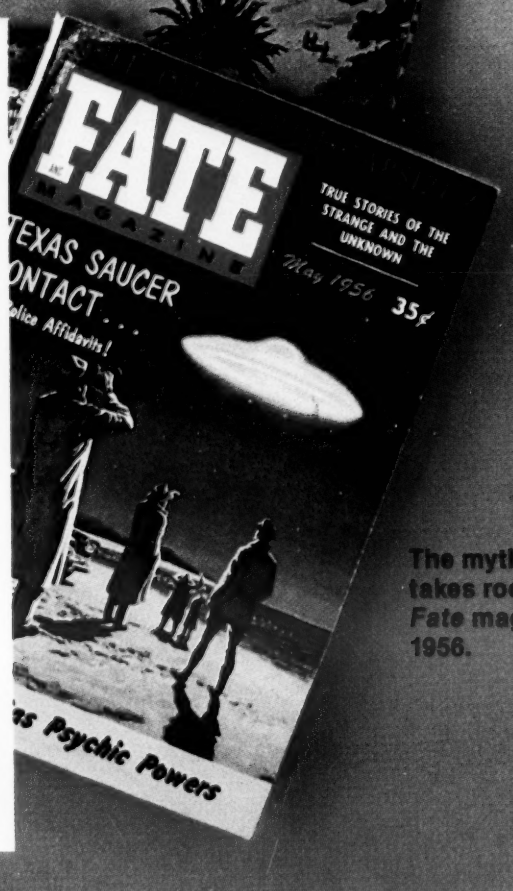
The seed is planted: Science fiction "pulp" magazine front and back covers, 1947 and 1948 *(see page 54)*.

"Flying saucers have become a living myth. We have here a golden opportunity to see how a legend is formed, and how in a difficult and dark time for humanity a miraculous tale grows up of an attempted intervention by extra-terrestrial 'heavenly' powers . . ." —**Carl Jung,** Flying Saucers: A Modern Myth of Things Seen in the Sky (1958)

© Douglas Curran

Eighty-three-year-old Ruth Norman's Unarius Foundation is just one of hundreds of flying saucer religions flourishing in the 1980s *(see page 62)*.



The myth takes root: *Fate* **magazine, 1956.**

Photo by Don Ryan